WOODWORKERS AND SAWMILL SUPPLIES

BEVAN & EDWARDS

PTY. LTD.

Machinery and Tool Merchants.

GENERAL CATALOGUE

OF

Woodworkers' & Sawmill Supplies

Offices and Warehouse:

KING STREET, Corner LITTLE COLLINS STREET

MELBOURNE.

Telephones: Central 9791—4 Lines

Codes Used: A.B.C. 6th Edition, Liebers, Western Union.
Cable Address: "Mechanical," Melbourne.
Telegrams: "Mechanical," Melbourne.

PREFACE

WE have pleasure in submitting our new General Catalogue of SAW-MILL and WOOD-WORKERS' SUPPLIES. This Catalogue gives a representative idea of the range of our stock for these requirements. It is possible, however, that if you do not find exactly what you require specified in these pages that, if you will refer your inquiry to us, we may be able to satisfy your requirements.

Prices and details of these Tools have been carefully revised and brought up to date. In submitting our prices, our object throughout has been to supply Tools of quality at consistent market quotations.

All of the Tools illustrated are made by the best makers, whose names alone are guarantee of best possible execution and high-grade finish. Nevertheless, should any fault be found through bad workmanship, we will endeavour to replace same, but cannot accept any further responsibility.

ALTERATIONS IN PRICES.—It is obvious from the present state of the market that prices must fluctuate, and accordingly slight alterations in prices may take place from time to time. This we cannot undertake to advise, but customers may, in the case of a rise, rely on same being strictly in accordance with market conditions, and, should any reductions take place, on receipt of orders our prices will be automatically reduced.

All goods are packed and protected where necessary, but we cannot accept any responsibility for goods that may be damaged in transit.

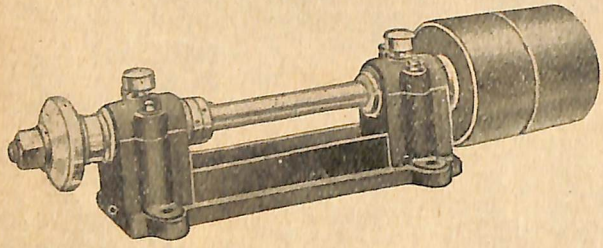
Our terms are monthly accounts, but all orders from new customers should be accompanied with the usual trade references and remittance for the full amount of the order.


SMALL TOOL DEPARTMENT
B.S.A.
MACHINERY DEPT GROUND FLOOR
MACHINERY DEPT 2ND FLOOR
EDWARDS
EDWARDS BEVAN LTD
WAREHOUSE & SHOWROOMS
SMALL TOOL DEPT
GRINDING WHEEL DEPT

CIRCULAR SAW SPINDLES

We can supply a simple plain Saw Spindle, as the illustration, with white metal bearings and grooved spindle, complete, with collars, etc., in the following sizes:—

Diameter of Spindle.	Length.	Price.	Diameter of Spindle.	Length.	Price.
2′ 3″	1″	2/7/6	5′ 6″	2¼	5/17/6
3′ 0″	1¼	3/-/-	6′ 0″	2½	8/15/0
3′ 6″	1½	4/-/-	6′ 0″	3″	11/7/6
4′ 6″	1¾	4/12/6	8′ 0″	3½	17/5/-
5′ 0″	2″	5/12/6			



BALL BEARING CIRCULAR SAW SPINDLES

This is an improved type of inexpensive Spindle, suitable for attaching intact to a wooden frame fitted with ball bearings and fast and loose pulleys.

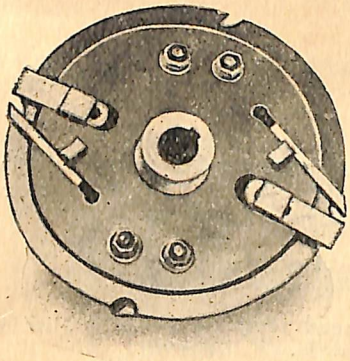
——	For Saws up to.	Spindle End.	Size of Pulleys.	R.P.M.	Price.
No. 1	18″	1¼	6 x 3	2,000	11/5/-
No. 2	26	1½	8 x 4½	1,500	12/10/-
No. 3	32	1½	8 x 4½	1,350	15/-/-

CIRCULAR SAWS

We are at all times in a position to supply Circular Saws by leading makers. We give prices below of Circular Saws of British manufacture, being by Messrs. Wheatman and Smith:—

Diameter.	Gauge.	Price.
20	—	1/14/3
22	—	2/-/-
24	—	2/5/3
30	8	4/7/1
30	9	4/5/1
30	10	3/16/10
30	12	3/13/3
36	8	6/10/-
36	9	6/2/6
36	10 to 14	5/15/-
42	8	8/3/6
42	9 to 11	7/11/6
48	..	11/7/6

We are pleased to quote other makes, sizes and gauges on application.



CIRCULAR CUTTER BLOCK
OR
EXPANDING, TRENCHING AND GROOVING HEAD

For use on circular saw and moulder spindles for grooving and beading straight and cross-grained boards, as well as for lock-cornering.

NO. 1.

8¾ in. diameter, for grooves from ¼ in. to ⅝ in. wide.
Price, £7/10/ each complete.

NO. 2.

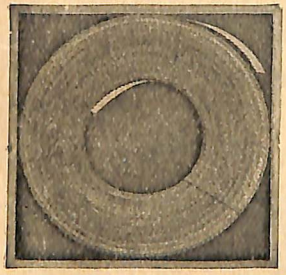
10 in. diameter, for grooves from ⅝ in. to 1 in. wide.
Price, £8/5/ each complete.

WABBLING OR GROOVING SAWS

We can supply these Saws in a big range, as the following list indicates.

Diam.	Thickness. ⅛	3/16	¼	5/16	⅜	½
4 in.	9/	13/6	15/6	24/	27/	30/
5 in.	12/	17/	21/	30/	33/	43/
6 in.	13/3	18/	24/	33/	36/	44/
7 in.	17/	21/	27/	36/	42/	45/
8 in.	19/3	24/	30/	39/	48/	54/
9 in.	22/3	36/	42/	48/	54/	60/
10 in.	27/	42/	48/	54/	60/	66/
12 in.	30/	49/3	54/	60/	66/	72/

For suitable Collars for use with these Saws see page ???.



BAND SAW BLADE

We supply Band Saws, brazed, sharpened, and set ready for use when required.

Width .	¼	5/16	⅜	½	⅝	¾	⅞	1 in
Price . .	7d.	7d.	8d.	9d.	10d.	11d.	1/	1/ per foot

Brazing, 1/6 per saw.

Setting and Sharpening up to 16 ft., 2/.
Over 16 ft., 2/6 each saw.

FRET OR JIG SAW BLADES

Length 8 in.	Width.	Price.	Length 10 in.	Width.	Price.	Length 12 in.	Width.	Price.
	1-8	12/		⅛	13/3		⅛	14/
	3-16	14/6		3-16	14/6		3-16	14/6
	¼	16/9		¼	16/9		¼	17/6

PLANER KNIVES, Etc.

All Knives listed on this page are manufactured from best Sheffield steel, and as we carry a big range of Knives in stock suitable for our own stock machines, and further a stock of Knives to the templates more commonly used by our largest customers, we are on most occasions in a position to supply Knives from stock.

High-speed Knives.—In addition to the Knives listed herewith, we keep a big range of super high-speed Knives for use in moulding machines, etc., of the most advanced type, such as are manufactured by Messrs. Thomas Robinson, of Rochdale, for whom we are agents.

PLANING AND THICKNESSING MACHINE KNIVES

When ordering please state length, width and thickness, and send template showing position and size of slots, also say whether open or closed slots are required.

	Carbon.	H.S. Per inch.		Carbon.	H.S. Per inch.
2½ in. wide x 5-16 in. to ⅜ in. thick ..	1/6	2/6	3½ in wide x 5-16 in. to ⅜ in. thick ..	2/	2/9
3 in. wide x 5-16 in. to ⅜ in. thick ..	1/9	2/6	3¾in. wide x 5-16 in. to ⅜ in. thick ..	2/2	3/
3¼in. wide x 5-16 in. to ⅜in. thick ..	1/10	2/6	4 in. wide x 5-16 in. to ⅜ in. thick ..	2/3	3/

THIN PLANING MACHINE KNIVES

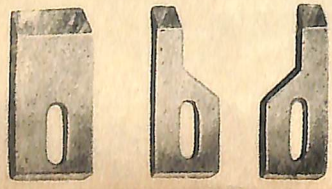
FOR CIRCULAR SAFETY CUTTER BLOCKS.

These Knives are precision ground to ensure even thickness throughout the whole length of the blade.

		Carbon Steel.	High-speed steel.
1 in. and 1⅛ in. wide by ⅛ in. thick	per inch	1/	1/7
1½ in. wide by ⅛ in. thick	per inch	1/2	1/7
1¼ in. wide by 3-16 in. thick	per inch	1/3	1/7
1½ in. and 1¾ in. wide by 3-16 in. thick	per inch	1/3	1/11

PLAIN CUTTERS, WITH SLOTS

FOR SQUARE CUTTER BLOCKS.



These Cutters can be supplied hardened and ground, or left soft for customers to shape same.

Standard Cutters are 4½ in. long x 1¾ in. wide, cut to any width at edge. 6/6 each.

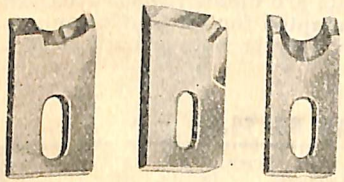
Rebate Iron Cut, ⅜ to 1¼ x 4½ in., high speed .. 6/11 each.

Rebate Iron Cut, ⅜ to 1¼ x 4 in., high speed .. 6/8 each.

In ordering state whether closed or open slots are required.

WOODWORKERS' KNIVES

MOULDING CUTTERS WITH SLOTS FOR SQUARE CUTTER BLOCKS



Our Standard Cutters are 4½ in. x 2 in. Price, 8/6 each. Ground to shape.

When ordering, please state width and length of cutters, width of slots, and supply template or full size sketch of face side of cutters.

PLAIN CHIPPING CUTTERS—CARBON STEEL

4½ x 1½	x 5-16 or ⅜	thick	5/ each.
4½ x 2	x 5-16 or ⅜	„	5/9 „
4½ x 2½	x 5-16 or ⅜	„	6/6 „
4½ x 3	x 5-16 or ⅜	„	7/9 „

ZENOGEN HIGH SPEED AND IRON

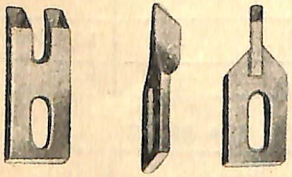
4½ x 1½	x ⅜	thick	6/2 each
4½ x 2	x ⅜	„	7/6 „
4½ x 2½	x ⅜	„	7/8 „
4½ x 3	x ⅜	„	9/3 „

CUTTERS FOR GROOVED COLLARS AND FRENCH SPINDLES

When ordering, please state dimensions of cutters, whether soft blanks or finished cutters are required, and supply template or full size sketch of face side of cutter.

Standard size, 4 in. x 2 in., 8/ each.
Includes grinding to shape.

TONGUING AND GROOVING CUTTERS WITH SLOTS



When ordering, please state size and length of cutters and width of slots.

We can supply cutters as listed below, both in carbon steel and 14 per cent. Tungsten high speed steel on iron backs.

Carbon steel stock sizes, 3-16, ¼, 5-16 and ⅜ wide, 4½ long, 1¾ wide, ⅜ thick, 13/3 per pair.

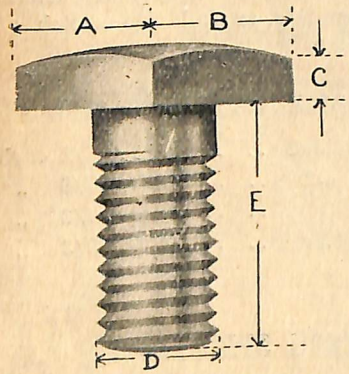
ZENOGEN HIGH-SPEED STEEL ON IRON

⅜	cut x ⅜	thick x 4½	long	Price per pair,		15/
½	„ ⅜	„ x 4½	„	„	„	15/
1	„ ⅜	„ x 4½	„	„	„	15/
1¼	„ ⅜	„ x 4½	„	„	„	15/
⅝	„ ⅜	„ x 4	„	„	„	14/6
¾	„ ⅜	„ x 4	„	„	„	14/6
1	„ ⅜	„ x 4	„	„	„	14/6

STEEL PLANER BOLTS

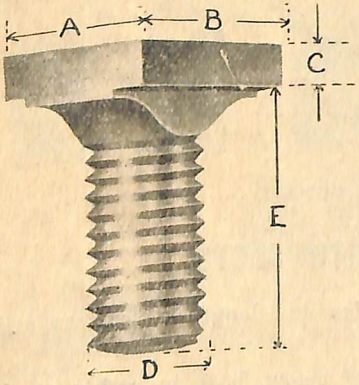
We stock a large range of these Bolts, and the following list covers the dimensions and details of the principal stock lines.

All of these Bolts are imported and highly finished. The Bolts are milled from the highest grade Bessemer steel, and are so made that they are particularly adapted for the particular service required of planer head bolts. The washers are from steel bar, and the nuts of highest quality and case hardened.



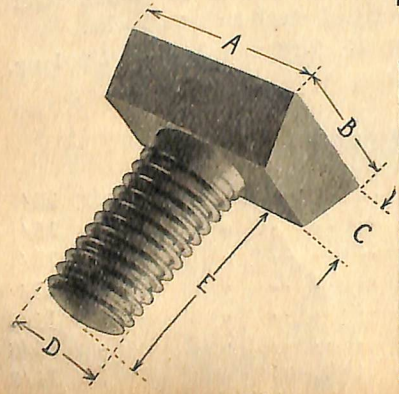
SQUARE HEAD BOLTS.

Head Dimensions.			Screw. Diameter.	Length.	Price.
A	B	C	D	E	
1¼	1¼	⅜	¾	1½	26/- doz.
1¼	1¼	⅜	⅜	1⅝	26/- ,,
1¼	1¼	¼	⅝	1¼	25/- ,,
1⅛	1⅛	⅜	⅝	1¼	25/- ,,
1⅛	1⅛	5/16	½	1½	25/- ,,
1 1/16	1 1/16	11/32	½	1¾	25/- ,,
1	1	⅜	⅝	1⅜	24/- ,,
1	1	5/16	9/16	1¼	24/- ,,
⅞	⅞	5/16	½	1⅛	24/- ,,
¾	¾	¼	½	1⅛	24/- ,,



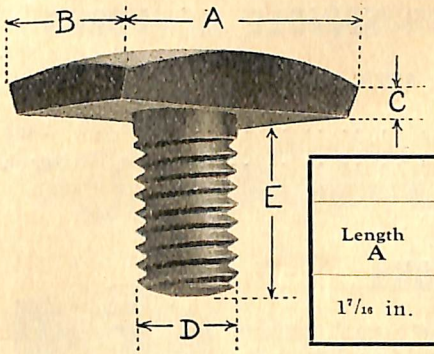
FILLET HEAD BOLTS

Head Dimensions.			Screw. Diameter.	Length.	Price.
A	B	C	D	E	
⅞	⅞	¼	½	1⅛	25/- doz.
1	1	5/16	9/16	1¼	25/- ,,



DOVETAIL HEAD BOLTS, 60° SIDES

Head Dimensions.			Screw. Diameter.	Length.	Price.
A	B	C	D	E	
1	¾	⅜	½	1⅛	25/- doz.
1⅜	13/16	⅜	½	1	25/- ,,
1⅜	1	¼	½	⅞	25/- ,,
1⅜	1	7/16	⅝	1¼	25/- ,,
1½	1⅛	7/16	⅝	1¼	25/- ,,



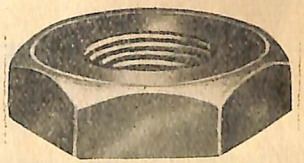
PLANER BOLTS AND NUTS, ETC.

PLANER BOLTS

HEAD			SCREW		Price Per doz.
Length A	Width B	Thickness C	Diameter D	Length E	
1 7/16 in.	1 in.	5/16 in.	½ in.	⅞ in.	26/-

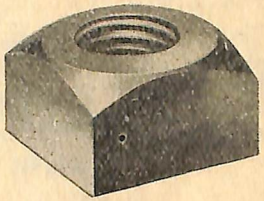
PLANER BOLT NUTS

These nuts are all of specially high-grade workmanship, being uniform to size, and with first-class tight fitting threads, well finished and case hardened.



HEXAGON

Diam.	½ in.	9-16 in.	⅝ in.	¾ in.
Width across flats . . .				
Price per Dozen . . .	11/	11/6	12/	12/6



SQUARE

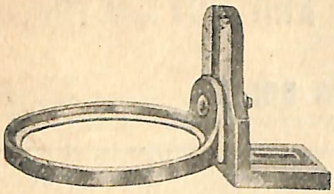
Diam.	½ in.	9-16 in.	⅝ in.	¾ in.
Price per Dozen . . .	10/6	11/	11/6	12/

WASHERS

The Washers we supply are all turned from the best Bessemer steel bar, and well finished and free from "burrs," giving a good seating to the nut.

Suitable for bolt diam.	½ in.	9-16 in.	⅝ in.	¾ in.
Per dozen	2/6	2/9	3/	3/3

We have found it necessary to list our Bolts and Nuts separately as given above, owing to the diverse requirements from various customers in the range of sizes required, and some calling for hexazon and others square nuts. On receipt of instructions, however, bolts will be provided with nuts and washers complete if required at the aggregate prices listed above, which prices will be found to work out at well within market quotations.

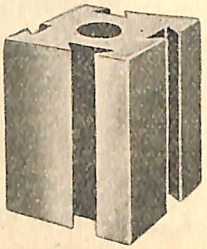


RING FENCES FOR SPINDLE MOULDERS

STANDARD SIZES, as follows:

6-inch Internal Diameter .. .. Price, 50/ each
3¾-inch Internal Diameter .. .. Price, 45/ each

SQUARE DOVETAIL CUTTER BLOCKS

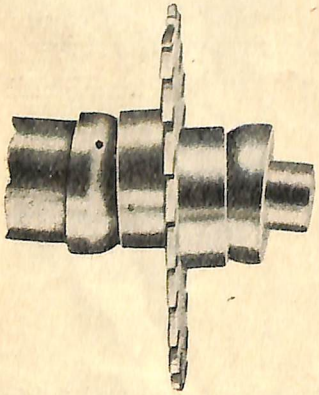


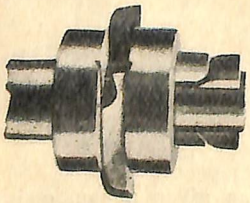
These Blocks are 2⅞ in. square, and are bored to suit customers' requirements, any spindle diameter up to 1¼ in. The prices include two ⅝ in. bolts complete with nuts and washers.

Length	3 in.	4 in.	5 in.	6 in.
Price	75/	82/6	87/6	90/

When ordering state diameter of s pindle, also particulars of driving pin, if any.

BALL JOINT FILLING COLLARS FOR WOOD SHAPERS



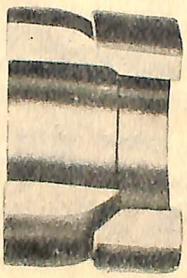


BALL JOINT COLLARS FOR WABBLING PURPOSES.

Place one pair collars upside down, and the other pair right side up, with Saw in between. (See cut).

Can be used either on Shaper or Saw Mandrel.

Will positively guarantee not to slip or move and will stay in any position placed.



Ball Joint Filling Collars are to be used directly over slotted collars, and will overcome any difference there may be in knives.

Insures an equal pressure on both knives and will give a true running spindle, enabling operator to do smooth work.

Ball Joint Filling Collars are made of good quality steel, 2 in. outside diameter, and are always kept in stock, and can be bored to suit any of the following size spindles. Price includes boring to fit spindle. Price, 48/ per set.

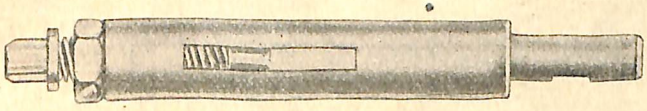
SHAPING MACHINE ATTACHMENTS

LOOSE SCREWED SPINDLES.

For carrying cutter blocks, slotted collars, grooving saws, etc.

Dia.	¾in.	1in.	1¼in.	1½in.	1¾in.	2in.
	45/	46/	47/6	49/	54/	60/

When ordering give particulars of shank required and dimensions.



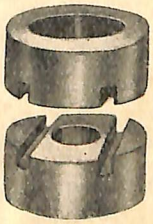
SLOTTED FRENCH SPINDLES.

For carrying one cutter only, which is secured by hardened steel setscrew; standard slots are 3-16 in. wide in the ¾ in. and 1 in. spindles, and ¼ in. wide in the larger sizes.

Diam.	¾in.	1in.	1¼in.	1½in.	1¾in.	2in.
Length of Slot	$2\frac{11}{16}$in.	$3\frac{11}{16}$in.	$4\frac{3}{16}$in.	$5\frac{3}{16}$in.	$5\frac{3}{16}$in.	$5\frac{3}{16}$in.
Price each ...	60/-	64/-	69/-	75/-	80/-	84/.

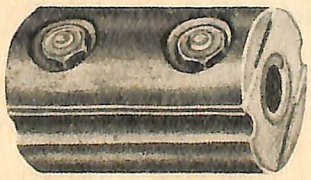
GROOVED OR SLOTTED COLLARS.

	Per pair
For ¾ in. diam. spindles, ..	£1/10/
For 1 in. diam. spindles ..	£1/12/6
For 1¼ in. diam. spindles ..	£1/15/



SPACING OR MAKE-UP COLLARS.

Up to 1 in thick and 1¼ in. bore, each 7/6
Up to 1½in. thick and 1¼in. bore, each 8/
Up to 2 in. thick and 1¼ in. bore, each 9/6



SAFETY CIRCULAR CUTTER BLOCK.

For use with vertical spindle moulders, overhead recessing machines, etc.

Length	2 in.	3 in.	4 in.	6 in.
Price	87/	97/6	108/	130/

The above prices include one pair best quality knives and spanner.

The cutting circle is 4½ in. and is bored to suit customers' requirements.

When ordering give all dimensions of the spindle.

VARIOUS WOOD WORKING BITS

THREE WING BORING AND SLOTTING BITS

These bits have ½" diam. shanks, are made from the finest quality tool steel and can be sharpened when necessary with a smooth file, but are better finished off with an India Stone, see page for priees of stones.

Size	1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"
Full length	3	3½	4	4½	5	5½	6	6¼	6½	7	7½	8
Length of shank	1½	1½	1½	1½	1¾	1¾	2	2	2	2	2	2
Price	7/3	7/3	7/7	8/3	8/9	9/3	9/9	10/6	11/3	12/3	13/6	17/-

MACHINE WOOD TWIST BITS WITH ½-inch ROUND SHANKS

Size	1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"
Length	4⅝"	5"	6⅛"	6⅜"	6¾"	7¼"	7¾"	8¼"	8¾"	9¼"	9¾"	10"	10¼"	10¾"	11"	11¾"	12½"	14½"	15"
Price	3/-	3/6	4/-	4/9	5/-	5/9	6/9	8/3	9/-	10/3	11/6	12/6	15/-	17/-	£1	£1/5/6	£1/11/-	£1/16/6	£2/8/-

Larger sizes than the above also stocked—prices on application.

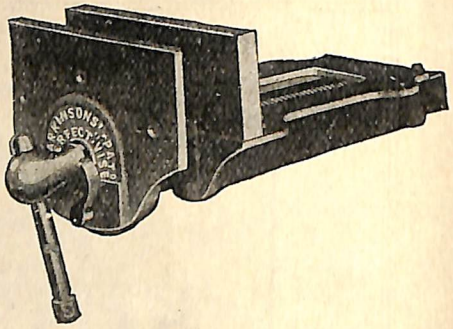
CLEVELAND WOOD BITS WITH BITSTOCK SHANK

Size	1/16"	3/32"	1/8"	5/32"	3/16"	7/32"	1/4"	9/32"	5/16"	11/32"	3/8"	13/32"	7/16"
Length over all	3½"	4"	4⅝"	5 3/16"	5 11/16"	6⅛"	6 9/16"	7"	7½"	7⅞"	8"	8¼"	8½"
Price doz.	11/9	11/9	11/9	13/-	14/9	16/6	18/6	£1/-/-	£1/2/-	£1/3/9	£1/5/6	£1/7/3	£1/9/3

Size	15/32"	1/2"	17/32"	9/16"	19/32"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"	1"
Length over all	8⅝"	9"	9"	9⅜"	9½"	9⅝"	9⅞"	9⅞"	9¾"	10"	10"	10"
Price doz.	£1/12/-	£1/14/9	£1/17/6	£2/-/-	£2/3/-	£2/5/9	£2/13/-	£3/-/-	£3/7/6	£3/16/6	£4/7/6	£4/18/6

TOOLS *for the* FILING ROOM

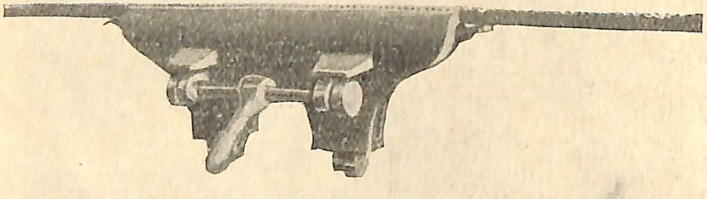
"PERFECT" WOODWORKERS' VICES



This Vice is provided with quick action and continuous screw motions. The rods are of bright steel, sliding in accurately machined housings.

No.	Width of Jaws.	Maximum Opening	Price Each.
52	7in.	8in.	24/6
52½	9in.	12in.	32/6
53	10½in.	12¾in.	34/6

BANDSAW SHARPENING VICE



This Vice has been designed specially for band and fret saw blades. The double eccentric motion gives an even pressure over the full length of the jaws. Adjustable depth gauges are provided to enable various widths of blades to be instantly placed at the right height for filing.

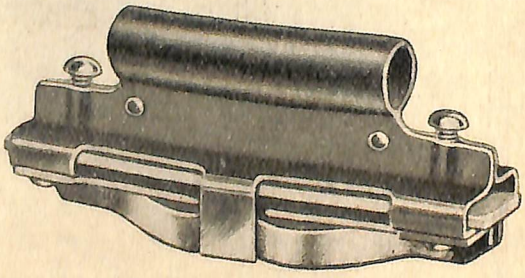
Width of Jaws—17 inch and 24 inch.

17-inch—Price, 29/6.

24-inch—Price, 67/6.

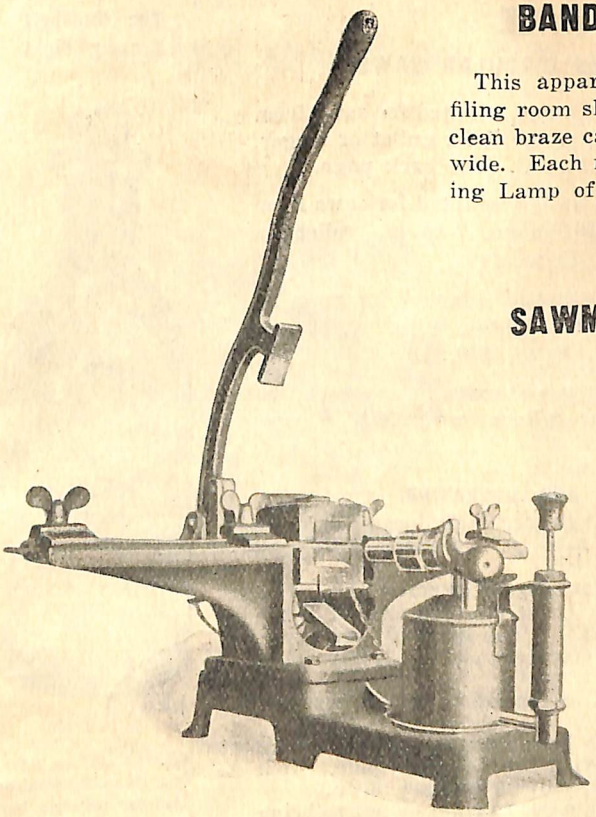
PIKE PERFECT SAW JOINTER AND SKATE SHARPENER

A substantial and efficient device, which joints saws of any thickness perfectly true. Gives excellent satisfaction, and for any kind of straight edge filing. Has an adjustable jaw, opening to a width of 3/8in. It is now made of steel. A distinct improvement over the old-style cast-iron jointer, and it is practically indestructible.



Price, 53/6.

BAND SAW BRAZING MACHINE



This apparatus is so simple and effective that no filing room should be without this equipment. A good, clean braze can be made on any band saw ⅛ in. to 2 in. wide. Each machine is provided with a Swedish Brazing Lamp of the highest quality.

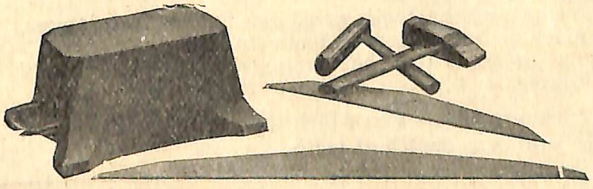
Price, £13 complete.

SAWMAKERS' STRAIGHT EDGES

We carry a comprehensive range of these Straight Edges in stock of the most reliable and best makes and first-grade workmanship.

Length.	Inches.	Price.
,,	12	10/6
,,	18	15/
,,	24	20/
,,	36	30/
,,	42	36/
,,	48	40/
,,	54	45/
,,	60	67/6

TOOLS FOR HAMMERING SAWS



We are in a position to supply at the shortest notice complete Circular and Band Saw Filing Room Equipment, including Anvils, Hammers, Back Gauges, etc., as well as Sharpening and Setting Machines, for which latter items, please refer to our Machinery Department.

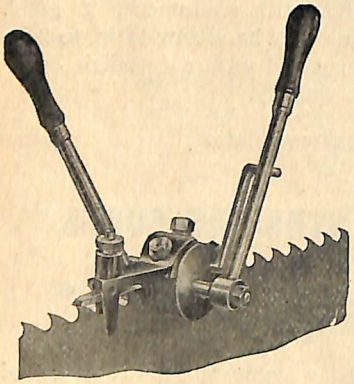
SAW MAKERS' ANVILS.—Best Quality Steel. Faced; approximate sizes, 5½ in. x 8 in., weight 70 lb.; 6 in. x 10 in., weight 150 lb.; 1/3 per lb.

SAW MAKERS' HAMMERS.—Round Faced, 2½ to 4 lb., 18/6 each. Square Faced, 2½ to 4 lb., 18/6 each.

BACK GAUGES.—5 ft. long x 2½ in. wide x ⅛ in. thick. Price 48/ each.

ECCENTRIC SWAGE

FOR BAND, GANG, CYLINDER and CIRCULAR SAWS.



No. 1 Swage, adapted for saws from 12 to 16 gauge, $\frac{5}{8}$ in. gullet or larger. Price, £11/9/. (See back page.)

No. 2 Swage, adapted for saws from 16 to 19 gauge, 7-16 in. gullet or larger. Price, £10.

No. 3 Swage, adapted for saws 20 gauge and lighter, $\frac{3}{8}$ in. gullet and larger. Price, £10.

By the use of extra brackets, can be used for cylinder and circular saws also.

INSTRUCTIONS FOR ADJUSTING AND OPERATING.

Before using the Swage, first observe that the eccentric does not revolve past the corner of the anvil die, and any attempt to force it will break one or both.

The dies are adjusted by first turning down anvil top screw (No. 9) on top of body, until highest part of eccentric (Part 1) strikes anvil. Then drop handle against rest and give screw No. 9 one quarter turn more, which will set anvil die past periphery of eccentric, making it impossible to pass.

When swaging, have the least amount of motion to lever necessary to give the required set.

If Swage should throw the point of tooth back, roll the block forward by loosening bracket clamp screw, and moving bracket up a trifle. If it throws point too far ahead, roll block back, moving bracket down.

Should the die, or eccentric, become worn, move to right or left to bring new face into place. When die becomes worn along one edge, remove lever, and reverse die. This gives double wear to each die. Should anvil also become worn it can be dressed by rubbing on emery cloth or ground on an emery wheel.

If Points of teeth are drawn out too long and thin, grind the bevel on the anvil a trifle longer.

If Swage cuts off too much of the tooth grind the flat surface longer, being governed by the mark or impression of teeth on anvil.

We will take pleasure in adjusting the Swage to special shapes of teeth upon receipt of templet or pattern of same with order.

When ordering, state thickness of saws on which the Swage is to be used, and send sketch of teeth.

The Hanchett Brazing Fluid

This fluid is a scientific chemical solution used for cleaning laps before brazing a band saw. No borax, acid, or other flux need be used. Those who have used it are highly pleased with it, and we can recommend it as the very best.

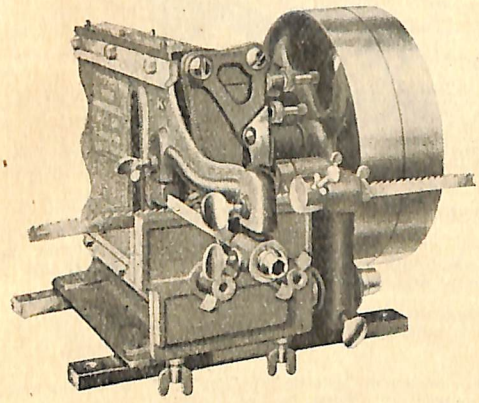
4 oz. bottle.

SILVER SOLDER FOR BAND SAW BRAZING.

We have for many years specialised in the sale of strictly first quality silver solder. Lt is the "best," not the "just-as-good" kind. The price per ounce is rather less important than the making of perfect brazes that hold, and since an ounce of solder will serve for from 6 to 15 brazes, according to the width of the saws in use, the saving of a cent a braze by buying a cheap brittle alloy is not an economy when it involves the risk of losing the braze and all the labour put on it.

Price, 6/6 per oz. complete in brass box, solder being 1 in. wide.

SAW SHARPENING AND SETTING APPLIANCES



No. 6 COMBINATION BAND SAW, FILING, SETTING AND JOINTING MACHINE

This is the only machine that performs the two operations of filing and setting the bandsaw at the one time. It gives each tooth a clean, sharp cut, and can be so delicately adjusted as to leave the teeth without a particle of burr.

The setting device not only sets the teeth perfectly, but also each tooth in such a way as to allow the proper clearance behind the cutting edge. All wearing parts are made of steel, and the vise, through which the saw passes, is steel lined. Standard files 4½ inches, extra slim taper, or 7 inches long slim taper, are used.

The machine can be driven by hand or power.

MODEL K, FOR BAND SAWS ⅛ in. to 2 in. wide, 2 to 15 teeth to the inch.

Weight, 75 lbs. Always in Stock.

Price on Application.

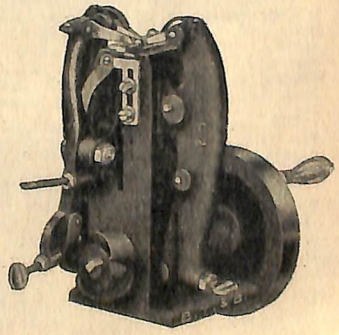
No. 3 BAND SAW SETTER

Automatic Saw Setter, for saws ⅛ in. to 1 in. wide.
Spaced ⅝ in. or less between the teeth.

Both hand and power Setters for fine tooth Saws. Sets the teeth faster, more accurately, and more uniformly than can possibly be done by hand.

The feeding and setting mechanism are strong and positive, pawls and hammers of finest steel properly hardened, feeds and sets two teeth at a time with each revolution of the pulley.

The force of the blow may be regulated to suit the weight and temper of the blade being set.



Weight, 20 lb. Price on application.

Regular stock line.

SWAGE SHAPER FOR BAND and GANG SAWS

Patent Applied For.

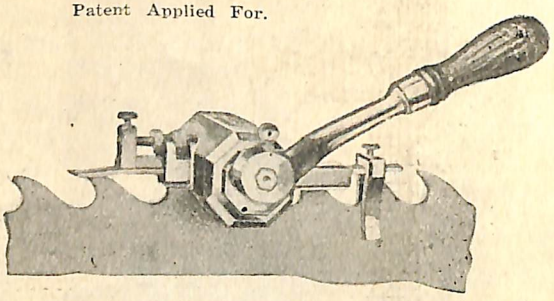
No. 1, for saws 14 gauge and heavier; will take in as small as 1½ in. space between teeth.

Price, £9/5/6.

No. 2, for saws 15 to 19 gauge; will take in as small as 1¼ in. space between teeth.

Price, £8/8/9.

When ordering state thickness of saw and space of teeth on which Shaper is to be used.



INSTRUCTIONS FOR OPERATING.

In adjusting Shaper on saw, note position shown in illustration. The teeth of saw should face away from the operator, who stands back of the Shaper, operating the movable lever with the right hand. Lever, however, can be adjusted to use with either right or left hand. Cut shows left-hand arrangement.

To increase the width of set, move tooth stop forward by moving the gauge bar. This is done by loosening the "jamb" nut, and turning the thumb nut. These two nuts can be seen at front of body of Shaper. To reduce width of set, move bar in opposite direction.

When dies begin to wear they must be ground. To remove them loosen upright thumbscrew in front of the nuts just referred to, take off the "tail-stop," or guide, and draw out gauge bar. Then, by pulling sidewise on the lever, the operating parts will come out, releasing the dies.

Make sure that the dies are ground on the same angle and same length—this is important. We furnish with each Shaper a grinding attachment for holding dies to maintain the proper angle.

When bevels on end become too long, grind face of die.

This swage shaper is designed for the purpose of making all the teeth of a uniform width, and at the same time give them the "back" and "under-cut" necessary for proper clearance and smooth sawing. It can readily be adjusted to rapidly shape teeth on saws of any thickness.

WRIGHT FRICTIONLESS BANDSAW GUIDE

In our frictionless saw guides the back of the saw runs against the face of a tempered tool steel disk, ground true and smooth, preventing the heating and crystallisation of the blade and the consequent tendency to cracking or breaking of saws from this cause.

The disk spindle has a long, accurately fitted bearing socket. is self-oiling, requiring attention say once a month. The oiling is accomplished by means of the machine screw plug in front end and of the disk spindle.

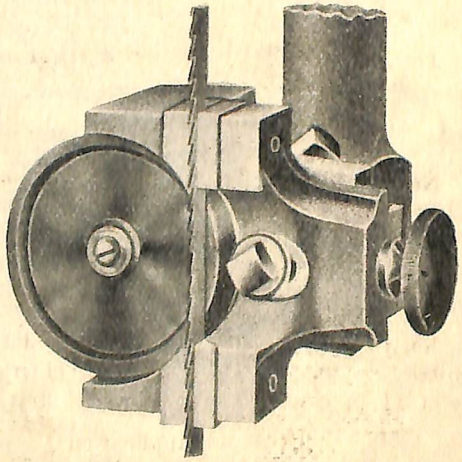
The end of the disk spindle bears against a hardened steel ball, and the pressure on back of saw is regulated by a spiral spring. This construction affords a frictionless thrust, which regulates the varying pressure ordinarily exerted upon the guides, and at the same time keeps the saw true to cut and does away with the tendency of saw to buckle on the back.

The smooth ground face of the disk is well adapted to keep the back edge of the saw perfectly true, without burr or upsetting.

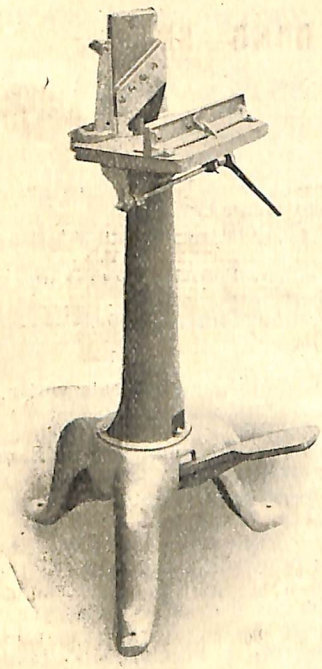
If the band saw construction requires a very short guide, the spiral spring may be omitted, the ball alone affording the same frictionless thrust. The omission of the spring from the smaller guides in no way impairs the efficiency, because of the light pressure exerted by narrow saws.

The side guides or jaws are of tool steel, hardened and polished, and practically frictionless, interchangeable, that is, either R.H. or L.H., and all guides are equipped with knurled screw adjustment for opening the jaws.

Price, £3/15/.



MITRE CUTTERS AND TRIMMERS



FOX TYPE MITRE CUTTERS

This Mitre Trimmer will cut two ends of mitres up to 3 in. wide at one stroke of the knives. The knives are treadle operated. The fence is set automatically from the handle shown, and is arranged with a pawl, so as to locate it without chance of alteration in any set position for different widths of cuts.

The machine is arranged on stand as shown, and on three widly-spreading feet, giving a firm foundation to the treadle motion.

Price, as shown, £20.

PERKINS' DRAW STROKE TRIMMER FOR BENCH

These Trimmers are provided with a lever to operate same by hand. This item is not shown owing to the shearing nature of the cut; the toughest timber and widest cuts are made cleanly and with the greatest ease.

The fence is adjustable for a big range of acute and obtuse angles.

Sizes.

No. 8.—Bed, 20 in. x 8 in. Will double forward mitre 5¼ in. wide; back mitre, 7 in. wide; will trim 7 in. wide; ⅝ in. draw to knife in cut.

Price, £16/10/.

No. 13.—Bed, 22 in. x 13 in. Will double forward mitre 7½ in. wide; back mitre, 11 in. wide; will trim 11 in. wide; 1¼ in. draw to knife in cut.

Price on application.

RENOLD MORTISE CHAIN GEAR.

INSTRUCTIONS FOR CARE AND MAINTENANCE.

LUBRICATION.

Oil is cheaper than guide bars and chains, and failure to lubricate adequately will destroy guide bar bearings and shorten the life of the chain. It may even lead to chain breakages.
Oil every half-hour, therefore, by pulling the chain one quarter-inch from the bar and squirting oil between chain and bar.
When the chains must be idle if even for a short time, it will pay you well to lay them in an oil bath. There is no better way to keep the chain fit and get the best work out of it.
The machinist will do well to remember always that oil is cheaper than Mortise Gear.

OPERATION.

The Mortise chain is not a transmission chain. It is a flexible, hardened. and accurate cutting tool, made as such and to be treated as such—handled with care.
Do not twist the chain or bend it sideways.
Never force the chain into the wood, but feed easily and smoothly; avoid any traversing or lateral movement in the work while cutting, or the chain may be broken
Use the correct sprocket—width and number of teeth—for the Mortise required.

ADJUSTMENT.

Renold Guide Bars are slotted for ease of chain adjustment—simply slide the bar on the securing bolt. The bar is slotted for a standard half-inch bolt.
Always keep the chain adjusted so that it can be pulled away from the bar one-quarter inch. A chain too slack will not give a clear cut. Habitual slackness will burr the bar and seize the roller bearing. A chain too tight will damage the sprocket spindle and roller bearing, and cause undue tension on the chain joints.
A new or repaired chain should be run idle for a few minutes and readjusted before being put into work.

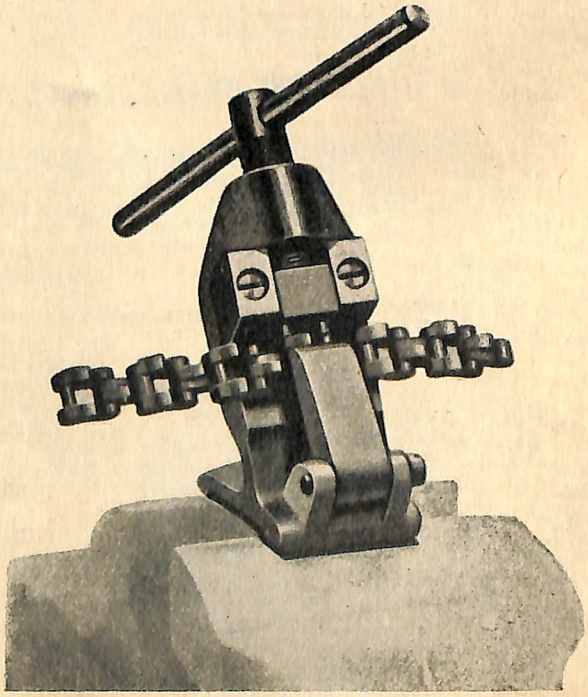
REPAIR.

The chains cannot be broken except by gross misuse, but the following remarks should be noted.

It is inadvisable to attempt repairs or alterations without the appropriate tools and repair parts. These can be supplied by us.

TO REMOVE A BLOCK.

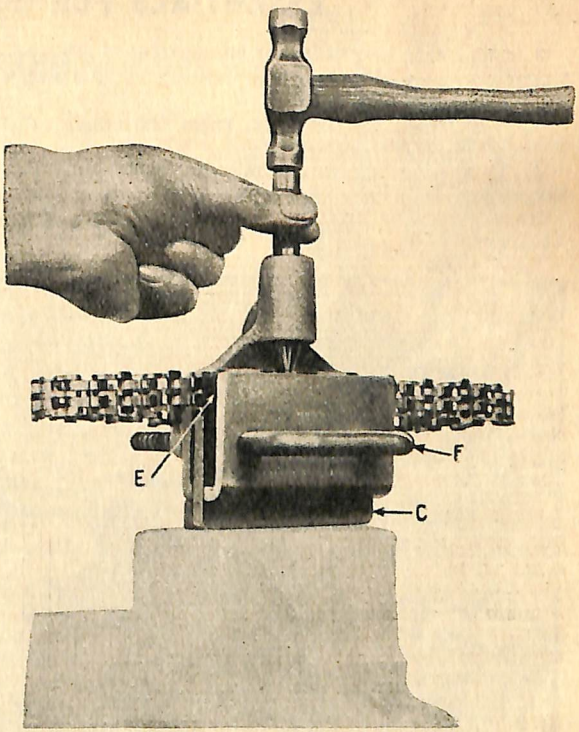
To take a chain to pieces, or to remove the end blocks of a broken chain, it is necessary to take out two or more studs. To do this one end of each stud must be ground down below the level of the block by a small diameter emery wheel, so as to remove the swelled-up head which fills the countersink in the block. Having done this, place the chain on the projecting lip of the stud extractor, and swing over the hinged arm which now forms an anvil or support for the outside link. Screw down the block containing the two drifts and force out the studs together with the other outside link. Ordinary hand pressure is all that is required. The most convenient way to use the stud extractor is to grip the special lug in the jaws of a bench vice, as shown in the illustration.



REPAIR PARTS.

Repair parts are supplied ready for use. These consist of inside and outside blocks and studs or rivets for chains, and complete end bearings or separate units for guide bars. The blocks for the chains are hardened and ground, and all the other repair parts, with the exception of the screws for guide bars, are hardened.

Great care should be exercised in the repair of chains and guide bars, as extreme accuracy is required to obtain satisfactory results.



TO ASSEMBLE THE CHAIN.

Blocks for any chain are supplied already hardened and sharpened. The broken chain must be made up to the correct length with these blocks, the new studs being placed in position in the holes. The Riveting Slide is now fixed in a bench vice, the jaws of which should grip it by the extreme lower end only, say not more than 1" up. The cam handle A is then rotated to permit the chain being placed in the Slide with its teeth against the leather pad B, and the top of the chain kept level with the top of the leather. The anvil plate C is then brought up against the bottom of the chain and the whole Slide lowered between the vice jaws until the plate C is resting on the front vice jaw. The chain will now be lying on its side on the top edge of the anvil plate, and will be held in this position by the clamp of the slide as illustrated. The stud can now be headed up by using a hammer on the punch which works in the guide. The point of the punch is ground on an angle, and during riveting must therefore be rotated so as to strike the stud head all round. To rivet up the next stud release the chain by means of the cam handle and move the chain along.

GRINDING.

When the cutting edges of a Mortise Chain are dull a strain is put on the chain links and studs, which often leads to breakage of the chain. The teeth of a chain that is working continually should be touched up daily with an oil stone slip. This must be applied to the face only, and never to the top or back of the links or the lip at the side, or you loose the necessary clearance and best cutting angle.

When the stone slip is no longer adequate, use a dished emery wheel and grind across the face of the links and slightly undercut. Never grind any other part.

The majority of Mortise Chain grinding machines cannot do this with satisfaction. Hans Renold Ltd. have designed a Mortise Chain grinding machine which does the work exactly as it should be done. It frequently doubles or even trebles the life of a chain, which can be ground from 50 to 100 times with this machine.

The whole machine is very solidly and durably constructed. Ball bearings are provided for the emery wheel spindle, and case-hardened steel bearings for the arbor.

Every machine is supplied complete with one ratchet wheel for both .89" and .54" pitch chains, together with four sprockets in all to be selected by the customer.

In addition to the above features a small knurled wheel is fitted. Turning this has the effect of advancing or withdrawing the emery wheel in the direction of its axis, By this means allowance in made for wear on the emery wheel or the faces of the teeth due to previous grinding.

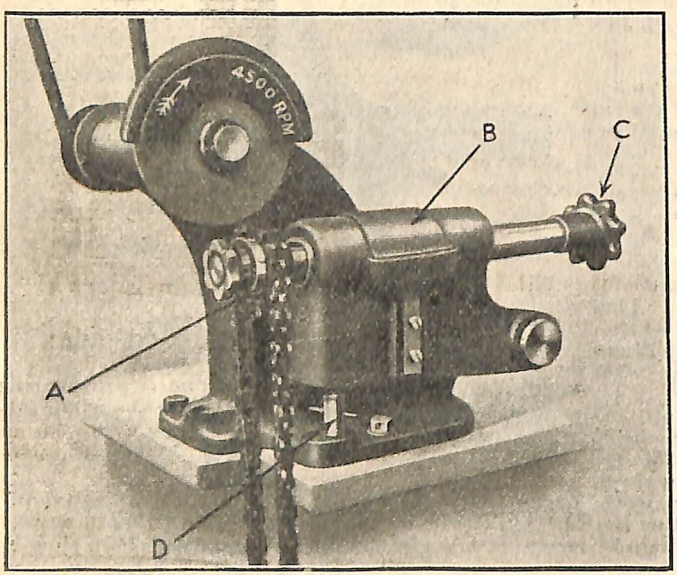
Provided the cutting edges of the chain are sharp, that the roller at the bottom of the guide bar is free, and that the correct guide bar and Sprocket are used with the chain, then square, clean-cut mortises will be produced with the minimum of effort, which, in rapidity of production, will far exceed the results obtained with any other type of mortising gear.

ESSENTIALS FOR CORRECT GRINDING

1. The angle or "hook" of the cutting teeth when the chain is new has been proved by years of experiment to give the best results. This angle must therefore be preserved when the chain is sharpened.

2. The depth, or distance, from the edges of the teeth to the bottom of the recess must likewise be kept the same.

3. It is most important, not only that every tooth should be ground to the correct angle and depth, as described above, but also that all the teeth should be ground to an equal extent. Otherwise those that are least ground do all the work, and that part of the chain is unduly strained.



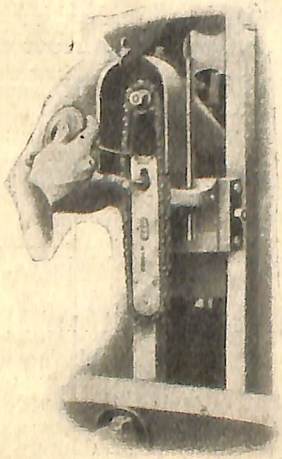
HOW THE MACHINE MEETS THESE THREE REQUIREMENTS

1. Correct Angle.—Referring to the illustration, the arbor "A" which carries the chain passes through a ratchet wheel inside the casing "B." When, therefore, the arbor is turned by means of the handwheel "C," each successive link is brought up in the same position relative to the emery wheel. The latter is not vertically over the centre line of the arbor, but slightly to one side. Each link, therefore, which comes under the emery wheel is facing a little upwards, and so is cut with the requisite "hook."

2. Correct Depth.—This is assured by the small adjusting screw "D." Turning this raises or lowers the whole casting carrying the arbor and chain. The machine is thus set to grind to the correct depth at the outset, and continues to do so until wear on the emery wheel necessitates a further adjustment.

3. Equal Grinding of all Teeth.—As already stated, the arbor "A" carries a ratchet wheel. After each link is ground the arbor is turned one tooth for .54 in. pitch chains, and two teeth for .89 in. pitch chains. Each link, therefore, comes in exactly the same place, and so receives the same amount of grinding.

Wear on Emery Wheel.—It is important to form or true up the emery wheel correctly, and for this purpose gauges can be obtained intended for each pitch of chain. The correct gauge must be used, as the radius at the edge of the wheel for .89 in. pitch chains is .055 in. and for .54 in. pitch chains .04 in.



Lubrication and Care of Renold Mortise Gears

The truest economy in dealing with chain mortise gear is to be liberal with oil. Oil is cheaper than guide bars and chains, and failure to lubricate properly will destroy the guide-bar bearings and shorten the life of the chain, or lead to breakages. A mortise chain has to run at a very high speed, and owing to the nature of the work is very apt to heat unless well oiled, and the same is true of the roller bearings in the bar.

To obtain the Best Results with Mortise Gear

1. Oil frequently, say about every half-hour.
2. Keep your chains and bars in an oil-bath when not in use.
3. Remove the side-plate of the bar occasionally, thoroughly clean and re-oil before replacing same.

RENOLD
MORTISE CHAINS, GUIDES AND SPROCKETS

.89 PITCH MORTISE GEAR

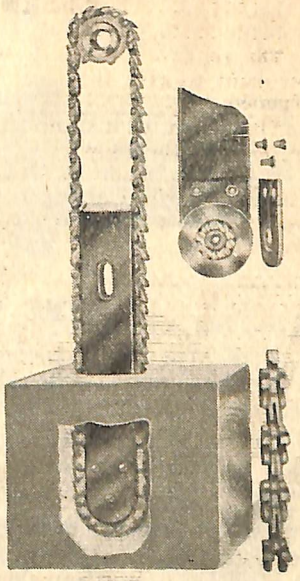
For all mortises of 1½ in. length and upwards chains of this pitch should be used. Messrs. Renolds make a standard range, cutting from ¼ in. wide to 1 in. wide (both inclusive), as listed hereunder. Regarding the prices of chains, these are for chains with the standard number of LINKS specified. These have been found by our records to suit the majority of mortise machines. If other combinations are required we shall be glad to quote special prices.

PRICES STANDARD .89 PITCH MORTISE GEAR

Size of Mortise			Guide Bar No.	Price	Chain No.	Number of Links	Price	Sprocket No.	Price
Width	Length	Depth							
Ins.	Ins.	Ins.							
¼	1½	4½	574	54/6	910	32	45/–	4 A	9/3
5/16	1½	5	577	56/–	911	32	47/–	4 B	
3/8					912	32	48/9		9/3
7/16	1½	5	582	57/–	913	32	50/6	4 C	9/3
½	1½	5½	588	58/–	914	34	57/–	4 D	9/3
	2		591	63/–				5 D	11/6
	2¼		592	65/6				6 D	14/–
5/8	1¾	5½	596	63/–	916	36	66/6	5 E	11/6
	2		597	65/6				5 E	11/6
	2¼		598	68/–				6 E	14/–
¾	2	6	602	68/–	917	36	74/–	5 F	11/6
	2½		604	71/–				7 F	15/9
⅞	2½	6	608	74/–	918	37	85/6	7 G	15/9
1	2½	6	611	76/–	919	37	95/6	7 H	15/9

SPARE PARTS AND CHAIN REPAIRING TOOLS

We carry in stock a very large range of extra Links, Rollers for Guide Bars and Renolds' Special Repair Outfits, as illustrated on previous pages, and shall be glad to quote on application.



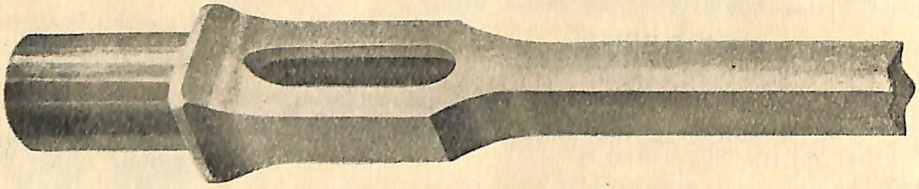
.54 PITCH MORTISE GEAR

The demand for Chains for cutting Small Mortises led to the manufacture of this standard line of Chains, cutting ¼ in. to 3/16 in. wide inclusive.

.54-in. Pitch.

Size of Mortise			Guide Bar No.	Chain No.	Sprocket No.
Wdth	Lgth	Dpth			
Ins.	Ins.	Ins.			
	¾	3	800 51/3 ea.		
	⅞	3½	801 55/- ea.		
¼	1	4	802 59/–	950 52 Lks. 82/- ea.	6 S 11/- ea.
	1⅛	4	803 60/6		
	1¼	4½	804 61/6 ea.		
	¾	3	806 53/- ea.		
5/16	⅞	3½	807 57/- ea.	951 54 Lks. 89/–	
	1	4	808 61/6 ea.		6 T
⅜	1⅛	4	809 63/- ea.	952 54 Lks. 92/- ea.	
	1¼	4½	810 64/6 ea.		

HOLLOW CHISELS.



THE "GREENLEE" RE-ENFORCED TYPE

Since the Stock in a Hollow Chisel diminishes with the smaller sizes it is frequently desirable that the length of square blade be reduced and its stiffness maintained without reducing the overall chisel length. This is accomplished by the type of chisel here illustrated.

This re-enforced type is regularly furnished in smaller sizes only, and for any ordinary work there is no objection to the decreased working depth for such sizes. For instance, a 4-inch blade Hollow Chisel in the ¼-inch size is re-enforced, and will mortise to a depth of about two inches.

However, as expert investigations show that a tenon furnishes the strongest joint if its length is four times its thickness, there is no practical reason why ¼-inch chisels should mortise more than 1¼ inches deep, as an extreme.

The ¼-inch and 5-16 in. in the 4 in. blade, the ⅜-inch in the 5-inch blade, are regularly carried in stock of the re-enforced type.

CARE AND SHARPENING OF CHISELS AND BITS.

The Hollow Chisel Mortiser is an economical type of machine, but depends for results on the type and mechanism and good condition of the machine, and then on the chisel and bit. Chisels and bits will not stand up if the machine is not in good order. Chisels also will not give good service if used with bits of different makes not made to jig with them unless of exactly similar sizes.

To get results the Chisels must be sharp and with proper form of cutting edges. Always follow the original outline of the edges on our chisels and preserve the double inner angle of these edges. We recommend sharpening with a file only, not by grinding. The best instructions for sharpening is to use a new chisel as a guide, keeping as near as possible to the original shape.

A Hollow Chisel Bit should produce a fine, well broken chip that can be readily cleared through the chisel. It can only do this when its edges are sharp and shaped as found on a new tool. Always file the cutting edges of a bit from below, with the file working in the throat through which the chips would pass. The side lips and spurs should be sharp and lined up evenly with the cutting edges.

A correct adjustment between bit and chisel when placed in the machine is of prime importance. A common method is to place the chisel in the socket with a slight clearance between its shoulder and face of chisel socket, fastening lightly. The bit is then inserted until its head rests on the cutting edge of the chisel and is securely fastened in this position. When the chisel is pushed back so that its shoulder rests against the face of the chisel socket, the proper clearance will be allowed.

The Hollow Chisel is by far the more expensive of the two tools, costing about four times as much as the bit. It is not economy to use bits that are not in first-class condition, as by so doing a greater strain is thrown on the chisel, with a breakage liable to result. Replace the bits when there is any question whatever of their doing their full share of the work.

HOLLOW CHISELS AND BITS

4-INCH BLADE HOLLOW CHISELS

Hollow Chisels with 4-inch blade have shank $\frac{5}{8}$ x 1 3/16-inch on sizes $\frac{1}{2}$-inch and smaller, $\frac{3}{4}$ x 1$\frac{1}{4}$-inch on sizes 9/16, $\frac{5}{8}$ and 11/16-inch, while larger sizes have 1$\frac{1}{8}$ x 1$\frac{1}{2}$-inch shank. The $\frac{1}{4}$ and 5/16-inch have reinforced blade to mortise 2 inches deep, all larger sizes having straight blade mortising to a depth of about 3 inches.

6-INCH TWIST HOLLOW CHISEL BITS (suitable for use with 4-in. Blade Chisels)

Bits of this type have shank dimensions 13/64-inch in diameter, except on 5/16-inch bits, which have $\frac{1}{4}$-inch shank, and on $\frac{3}{4}$-inch bits, which have shanks 3/16-inch diameter. The overall length of these bits is 9 inches long.

Note the thin knife-edged cutting spurs, which will make a smooth hole, even in soft holes. Moreover there is no centring point in this style bit; therefore they are particularly suitable where partial or blind holes are mortised.

PRICES.

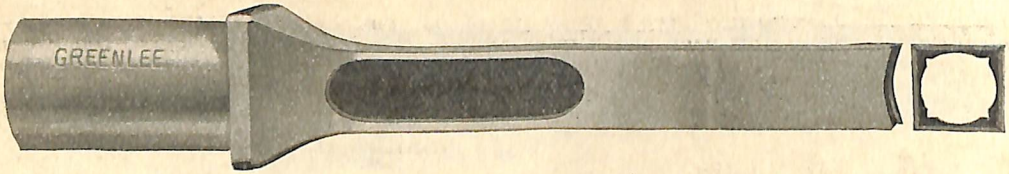
SQUARE

Size. Inch.	Chisel & Bit Complete. Each	Chisels Only. Each.	Bits Only. Each.
$\frac{1}{4}$	31/6	25/9	5/9
5/16	31/6	25/9	5/9
$\frac{3}{8}$	31/6	25/9	5/9
7/16	33/9	28/-	5/9
$\frac{1}{2}$	36/6	30/9	5/9
$\frac{5}{8}$	42/6	35/6	7/

OBLONG

Size. Inch.	Chisel & Bit Complete. Each	Chisels Only. Each.	Bits Only. Each.
$\frac{3}{8}$ x $\frac{1}{2}$	35/9	30/-	5/9
$\frac{1}{2}$ x $\frac{5}{8}$	40/9	35/-	5/9

HOLLOW CHISELS

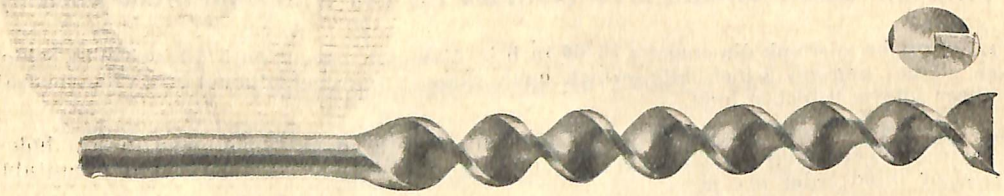


5-INCH BLADE HOLLOW CHISEL

All sizes ¾-inch and smaller have shank 1½- inch diameter, 1¾-inch long, while sizes ⅞-inch to 1¼-inch have shank 1⅝ x 1¾-inch. The ⅜-inch chisels are regularly supplied with reinforced blade to mortise 2 inches deep, and larger sizes having straight blade will mortise to a depth of about 4 inches.

Bits for use in these chisels have 7-inch twist, 10-inch overall.

These chisels have smooth bore, with broaching in the four corners, and with a single opening for the clearance of chips.



7-INCH TWIST CHISEL BITS (suitable for use with 5-inch Blade Chisels)

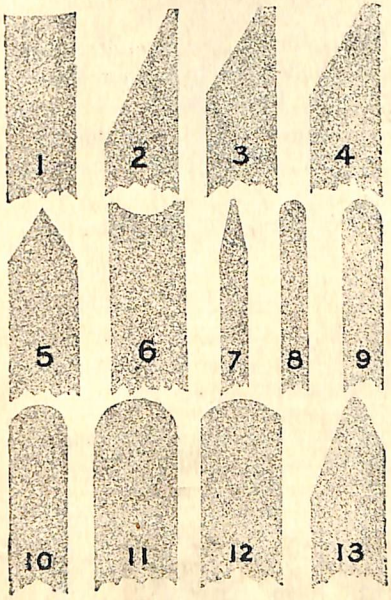
These bits have 7-inch twist, 10 inches overall, and are used in 5-inch blade chisels. ¾-inch and smaller have 19/64 shank, larger sizes having ½-inch shank. The ⅞ and 1 inch are also made with ½-inch shank.

PRICES.

Size. Inch.	Chisel & Bit Complete. Each.	Chisels Only. Each.	Bits Only. Each.
⅜	40/6	34/-	6/6
½	45/	38/6	6/6
9/16	48/	41/-	7/
⅝	51/3	43/6	7/9
¾	57/9	48/3	9/6
⅞	60/	49/3	10/9
1	70/	57/9	12/3

GRINDING WHEELS

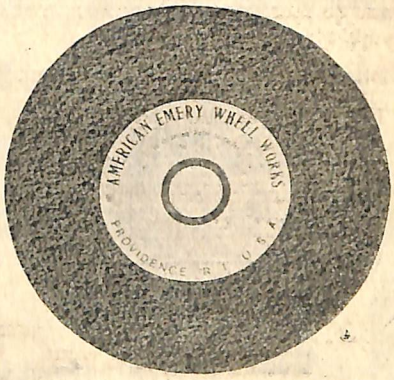
Grinding Wheels have always been a speciality of our business. If all the particulars you require are not found on this page please refer to our "Engineers'" Catalogue for further details. In the catalogue mentioned we give very complete particulars as to grading and shapes, etc.



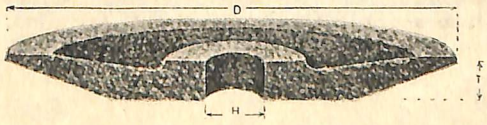
Thickness of Wheel in Inches.

Dia.	¼"	⅜"	½"	¾"	1"	1¼"	1½"	2"
4	2/8	3/4	3/4	4/–	4/8	5/5	6/2	7/5
6	4/7	5/9	5/9	7/–	8/2	9/4	10/8	13/–
8	6/6	8/6	8/6	10/7	12/6	14/8	16/6	20/7
9	7/5	9/11	9/11	12/6	15/1	17/9	20/2	25/5
10	8/8	11/9	11/9	14/10	18/–	21/4	24/6	30/9
12	10/1	14/5	14/5	18/8	22/9	27/–	31/6	40/–

The shapes shown here are those most commonly used for grinding, moulding, cutters, saws, etc. When ordering state reference number, diameter, thickness, and size of spindle hole required.



DISH WHEELS FOR SHARPENING MORTICE CHAINS



Owing to the offset of these wheels they are particularly useful in sharpening mortice chains, as they reach between the links without grinding and weakening the chain itself.

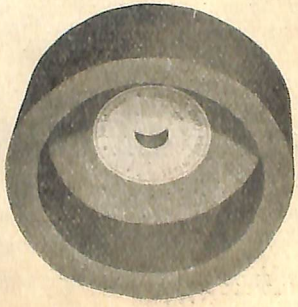
Diam.	3½	4½	6	8 inch
Price	3/6	4/6	5/9	10/6 each

Machines for use with these wheels quoted on application.

CUP WHEELS

These wheels have numerous advantages for knife grinding, as the grinding is all done with the edge. The surface speed always remains constant; further, the edge of the knife is not hollow ground.

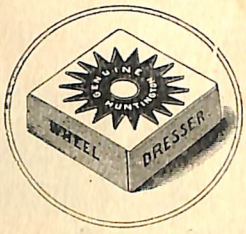
We can supply cup wheels to suit any make of plane iron grinding machine, and shall be pleased to quote against specification.



Prices:

	Diam.		
Depth.	8	10	12
4	39/–	50/6	61/–
5	39/6	59/6	71/–
6	51/6	66/6	80/–

HUNTINGTON WHEEL DRESSERS



The Huntington Dresser is equipped with a set of 4 cutters, having broad sharp points, each pair separated by a thin disk. This type of Dresser is more commonly used for general purposes than any other. For other types see the Engineers' Section of our Catalogue.

In use the tool is held firmly against the wheel, and at the same time moved across the face of the wheel, when it is running at its usual speed. The wheel can if necessary be dressed to any desired shape with this tool.

Price, 3/ each, including one extra set spare cutters. Extra spare Cutters, 4/6 per dozen sets.

SERVICE CRAMPS

This type of Cramp is made with a drop-forged frame of "H" section, and accordingly is exceptionally strong. The screw is of steel.

No.	Capacity.	Depth, Throat from Centre of Screw.	Extreme Dimensions. Length.	Extreme Dimensions. Width.	Screw Length. Diameter.	Screw Length. Over all.	Approximate Weight, each Pounds.	Price.
402	2	1¾	4⅜	3⅜	½	4 3/8	¾	4/-
403	3	2	5⅝	3¾	½	5 7/16	1¼	4/9
404	4	2⅜	7	4⅜	⅝	7 1/16	2	5/9
444	4	1½	6¾	3⅜	⅝	6⅜	1¾	5/9
406	6	3	9½	5¼	⅝	8 3/16	3	7/9
408	8	3⅜	12	5¼	¾	10	4½	10/6
410	10	3¾	14¼	6 7/16	¾	11 1/16	6	13/-
412	12	4	16½	6⅞	13/16	12½	7½	17/-

SINGLE-ENDED WRENCHES

These Wrenches are drop-forged of best materials, and have hardened and milled jaws.

Size of bolt ..	⅛	3/16	¼	5/16	⅜	7/16	½	9/16	⅝	¾	⅞	1″
Price	10d.	10d.	1/-	1/3	1/6	1/10	2/2	2/7	3/3	4/3	6/6	9/-

DOUBLE-ENDED WRENCHES

These Wrenches are of the same manufacture as the single-ended, with hardened and milled jaws.

Size of bol' ..	⅛ x 3/16	⅛ x ¼	3/16 x ¼	¼ x 5/16	5/16 x ⅜	⅜ x 7/16	⅜ x ½	7/16 x ½	½ x ⅝	⅝ x ¾	⅞ x 1
Price . ..	1/6	1/6	1/6	2/-	2/7	2/7	3/7	3/7	4/10	6/9	9/9

For more comprehensive range of Tools illustrated on this page see the Engineers' Section of our Catalgue.

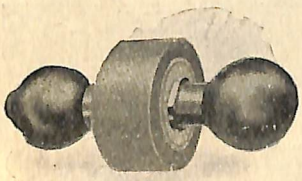
PIKE OIL

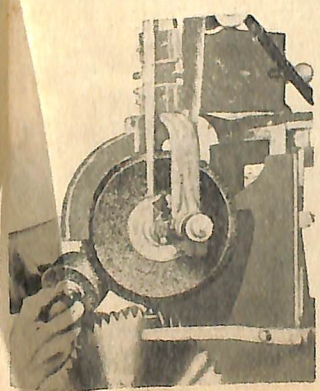
(Formerly Stonoil.)

Pike Oil is perfectly pure, acidless, and non-drying. It will not gum, nor will it corrode the most highly-polished metal. It is an oil that can be recommended with greatest safety for all purposes where a thin, pure oil is required as a lubricant or rust preventive. It is also used with a high degree of success for cleaning and polishing all kinds of wood and metal surfaces.

It is put up in two-ounce and six-ounce bottles, and in six-ounce cans with patent spout.

Two-ounce bottles . . . . 1/ each
Six-ounce bottles . . . . 1/9 each





METCALFE GRINDING WHEEL DRESSER

Especially suitable for Shaping the Face of a Wheel to any desired profile.

This consists of two heavy knobs at ends of a short shaft with an abrasive wheel (generally carbolite) between them. The knobs are of iron to give weight, and are held in the hands, as shown, when the dresser is in use. The three principles involved are—first, that of inertia, due to the weight of the balls; second, the peculiar cutting effect of one abrasive wheel on another when held at an angle of from 30 degrees to 40 degrees from the horizontal; and third, the gyroscopical action set up by the rapid rotation of the wheel on its axis. These things together account for the satisfactory working of the tool.

This appliance allows a coarse open face for rapid cutting, or a close-grained face for smooth work, these results being obtained by holding at different angles.

Price, 7/6 each.

PIKE OIL STONES FOR KNIFE FINISHING

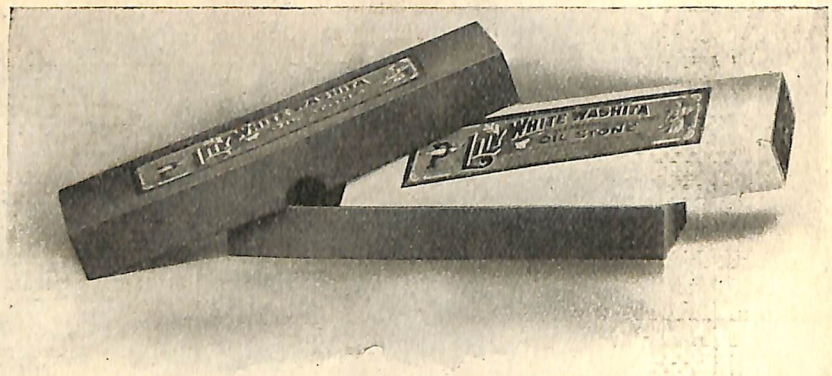
LILY WHITE WASHITA STONES

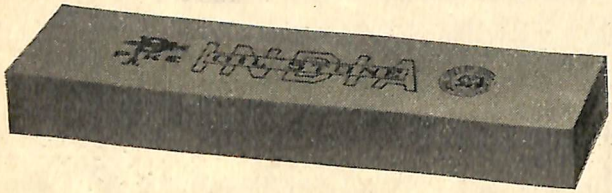
Lily White is the best selection of washita possible to obtain. It is uniform in texture, free from foreign substance, and is nicely finished. It is the most satisfactory natural grit oilstone ever produced for carpenters and general woodworkers' tools.

6 x 2 x 1, 3/ each.
8 x 2 x 1, 4/9 each.

Or mounted in wood case, as illustrated at foot of thi. page—

6 x 2 x 1, 3/6 each.
8 x 2 x 1, 5/9 each.





INDIA OIL STONES

India Oil Stones, cut rapidly, last longer and keep a better surface than any other artificial stone, and are a prominent and necessary factor wherever edge tools are used. In three grades—Fine, Medium, or Coarse:—

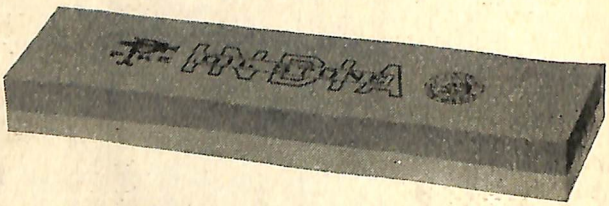
0—8 x 2	x 1	Price, each	5/9
1—8 x 1¾	x 1¼	,, ,,	6/9
1½—7 x 2	x 1	,, ,,	4/9
29—6 x 2	x 1	,, ,,	4/6

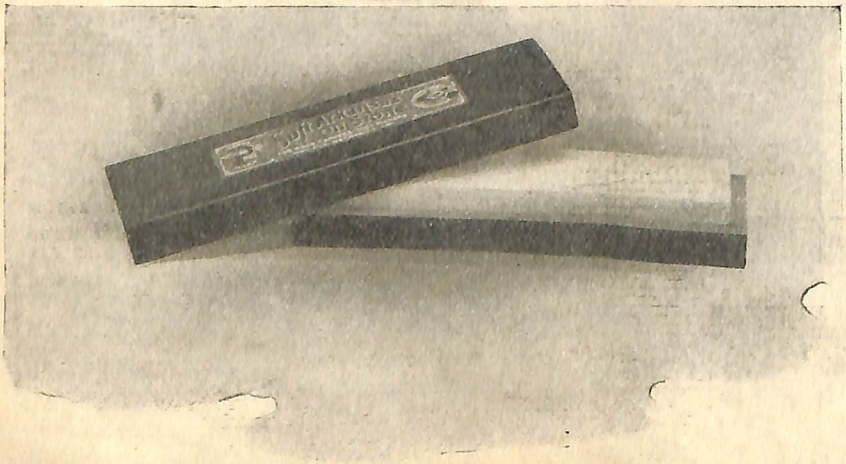
State which of three grades required.

INDIA COMBINATION OIL STONES

These Stones have the same characteristics as mentioned for "India" stones above, but are arranged with the advantage of having two stones vitrified together during manufacture, so they cannot come apart, the coarse side being used for grinding down dull tools, or tools badly nicked, the fine side for putting on a finishing edge:—

0—8 x 2 x 1	Price, each	7/6
29—6 x 2 x 1	,, ,,	5/9





ARKANSAS BENCH STONES

This is the Pike Co.'s highest grade stone, for all tools or instruments requiring long-lasting, keen-cutting edge.

Mounted in Polished Hardwood Box.

Prices:—

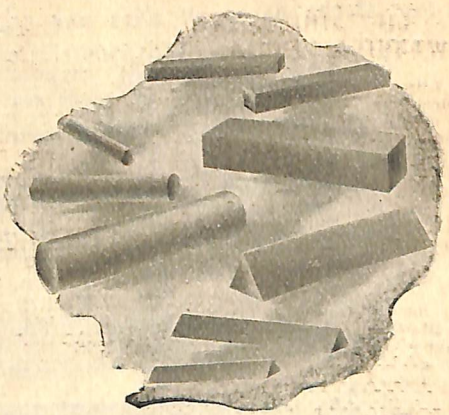
6in. x 2 x 1—
Hard, 16/; Soft, 6/9.

8in. x 2 x 1—
Hard, £1/1/9; Soft, 10/6.

The cases these stones are mounted in serve to keep the stones free from dust and dirt, and thoroughly oil moistened.

INDIA OIL STONES FOR KNIFE SHARPENING

The Stones listed on this page we claim to be the finest procurable for sharpening all kinds of plain or shaped cutters.



Square India Slips—

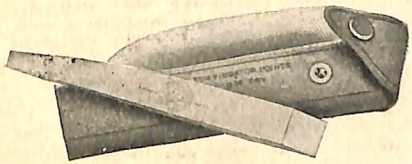
4—4″ x ½″ x ½″	price, each	2/-
5—4″ x ⅜″ x ⅜″	,, ,,	2/-
5½—4″ x 5/16″ x 5/16″	,,	2/-
6—4″ x ¼″ x ¼″	,,	2/-

Triangular India Slips—

7—4″ x ½″ x ½″	price, each	2/6
8—4″ x ⅜″ x ⅜″	,, ,,	2/6
8½—4″ x 5/16″ x 5/16″	,,	2/6
9—4″ x ¼″ x ¼″	,, ,,	2/6

Round India Slips—

10—4″ x ½″	price, each	2/9
11—4″ x ⅜″	,, ,,	2/9
11½—4″ x 5/16″	,,	2/9
12—4″ x ¼″	,,	2/9



No. 53 INDIA KNIFE SLIP STONE

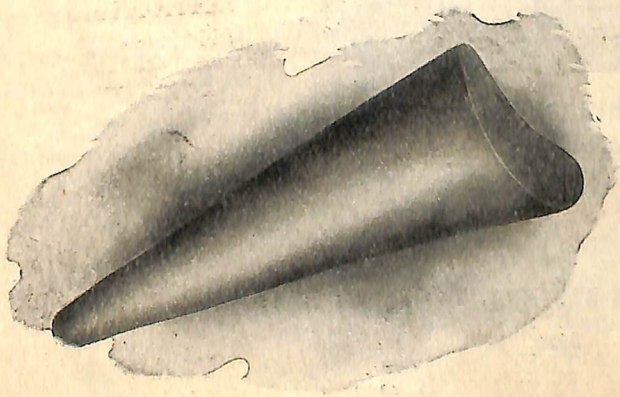
A Stone with edges especially suitable for touching up Auger Bits.

Price, each, 2/6.

Price, complete with Leather Case, 3/-.

INDIA SLIP STONES

13—4½ x 1¾ x ½ x 3/16	price each	2/6
14—4½ x 1¾ x ¾ x ¼	,, ,,	2/6
15—4½ x 1¾ x ¼ x 1/16	,, ,,	2/6
20—4 x 1 x 7/16 x 3/16	,, ,,	2/-
22—4½ x 2⅛ x ⅝ x 5/16	,, ,,	3/9
22½—6 x 2¼ x ¾ x ⅜	,, ,,	4/9



INDIA No. 21 GOUGE SLIP

This is a universal sharpening Stone, especially suitable for Gouges and all curved cutting edges, and for smoothing inside or outside curved surfaces.

Price, each, 5/9.

FILES

Our stocks cover all sizes and types of Files. Those illustrated are the commonly used, and generally suitable types for woodworkers.

(List prices see below. Discount on application.)

SLIM TAPER, 2nd Cut, Single

3in.	3½in.	4in.	4½in.	5in.	5½in.	6in.	7in.	8in.	9in.	10in.	
7/	7/	7/3	7/6	8/3	9/3	10/9	13/6	17/	21/6	24/	doz.
8d.	8d.	8d.	8d.	9d.	10d.	11d.	1/2	1/6	1/11	2/3	each.

TAPER SAW, 2nd Cut, Single

3in.	3½in.	4in.	4½in.	5in.	5½in.	6in.	7in.	8in.	9in.	10in.	
7/	7/	7/3	7/6	8/3	9/3	10/9	13/6	17/	21/6	24/	doz.
8d.	8d.	8d.	8d.	9d.	10d.	11d.	1/2	1/6	1/11	2/3	each.

BAND SAW TAPER FILES, 2nd Cut, Single

To prevent cracking, Band Saw Blades must have round gullets. The edges of these files are round, enabling this desired result to be obtained

4in.	4½in.	5in.	6in.	8in.	10in.	
12/	13/6	15/6	19/6	29/	40/	doz.
1/1	1/3	1/4	1/9	2/6	3/6	each.

MILL SAW BASTARD, One Round Edge

If desired these files can be supplied with two round edges.

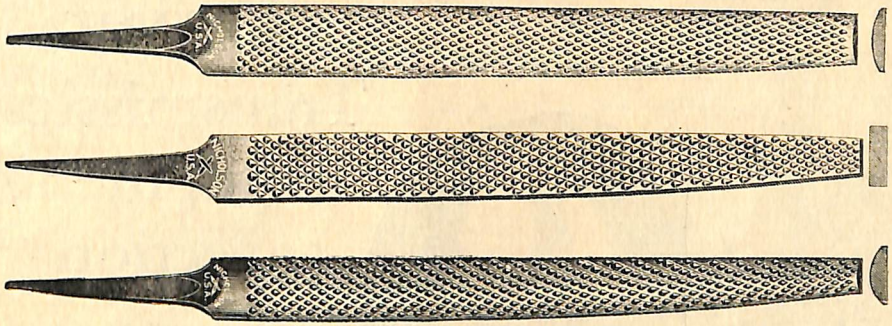
8in.	9in.	10in.	12in.	
13/	15/	17/	23/	doz.
1/2	1/4	1/6	2/2	each.

DISSTON'S MILL FINE BASTARD, Two Square Edges

8in.	9in.	10in.	12in.	
12/	14/	16/	21/6	doz.
1/1	1/3	1/6	1/11	each

WOOD FILES AND RASPS

Subject to Discount.



WOOD RASPS—Flat or Half Round

Size	6	8	10	12	14
Price per doz.	12/6	16/6	20/6	26/	36/
Price each	1/2	1/6	1/11	2/4	3/3

CABINET FILES AND RASPS—Half Round

Size	6	8	10	12	14
Price per doz.	15/6	20/3	25/6	31/6	42/
Price each	1/5	1/10	2/3	2/10	3/9

Discounts on Application.

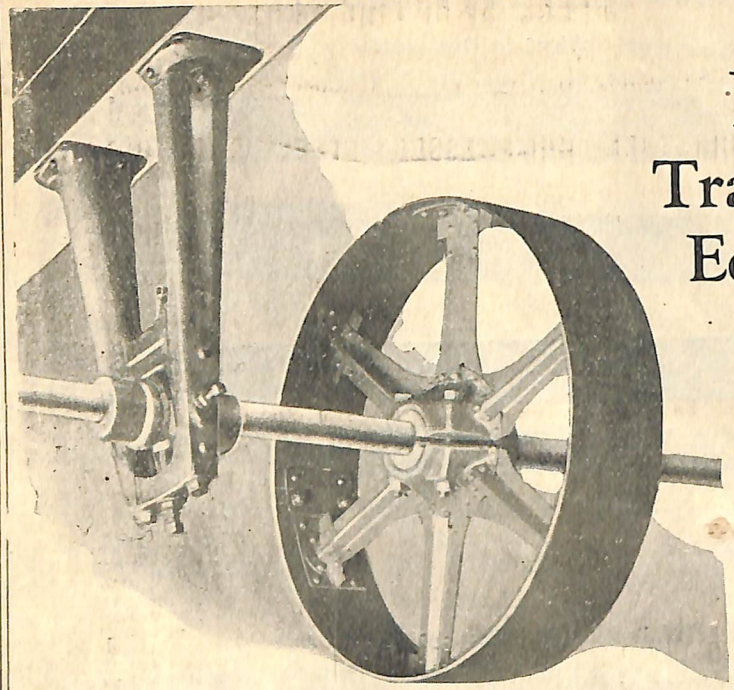
FILE CARDS

These File Cards are supplied with a flattened wire for removing pieces of metal which get caught in the coarse cuts of the file.

Size, 5½ x 1½, mounted on wood handle.—Price on application.

BEECHWOOD FILE HANDLES—With Spun Steel Ferrules

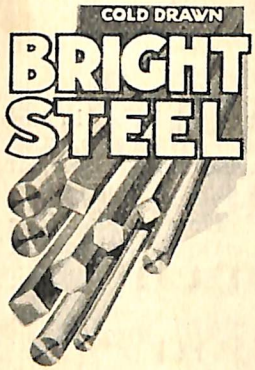
Size	3	4	5	5½	6 in.
Price	2/3	2/6	3/	3/3	3/6 per doz.



Power Transmission Equipment Section

REALIZING that in numerous instances the installation of Machine Tools and similar plant is dependent on the prompt supply of the necessary transmission gear, we are always in a good position to supply such equipment from stock, and further, especially prompt despatch is catered for in this department of our business. In the following pages there are listed:

Steel and Wood Split Pulleys
Shafting :: Collars :: Couplings
Friction Clutches :: Belting
Belt Fasteners, &c.



STEEL SHAFTING, Etc.

Stock covers a range of Bright Steel for all purposes, and we are in a position to supply requirements in **Rounds**, **Squares**, and **Hexagon** Bright Steel Bars.

KIRKSTALL COMPRESSED STEEL SHAFTING

We are prepared to supply any lengths of this material, and cut off lengths to suit customers, charging only exact cost of cutting.

	Round Section.									
Size of Shaft ..	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3
Weight per foot, in lbs.	1.473	2.618	4.091	5.890	8.018	10.472	13.25	16.36	19.80	24.03

Weights of Steel Shafting in Cwts. Quarters and Pounds.

Diameter.	Length in Feet.										
	14	15	16	17	18	19	20	21	22	23	24
Inches.											
1	1.9	1.12	1.15	1.17	1.20	1.23	1.25	2.0	2.3	2.5	2.8
1¼	2.2	2.7	2.11	2.15	2.19	2.23	2.27	3.4	3.8	3.11	3.15
1½	3.0	3.6	3.12	3.18	3.24	1.0.2	1.0 8	1.0.14	1.0.20	1.0.26	1.1.4
1¾	1.0.2	1.0.11	1.0.19	1.0.27	1.1.7	1.1.15	1.1.25	1.2.5	1.2.13	1.2.21	1.3.2
2	1.1.9	1.1.20	1.2.3	1.2.4	1.2.24	1.3.7	1.3.18	2.0.1	2.0.11	2.0.22	2.1.4
2¼	1.2.21	1.3.7	1.3.20	2.0.6	2.0.19	2.1.5	2.1.18	2.2.4	2.2.17	2.3.3	2.3.16
2½	2.0.9	2.0.26	2.1.15	2.2.4	2.2.20	2.3.9	2.3.26	3.0.14	3.1.3	3.1.20	3.2.9
2¾	2.2.3	2.2.23	2.3.15	3.0.7	3.0.27	3.1.20	3.2.12	3.3.4	3.3.24	4.0.17	4.1.9
3	3.0.0	3.0.25	3.1.20	3.2.17	3.3.13	4.0.9	4.1.5	4.2.1	4.2.25	4.3.21	5.0.17
3¼	3.2.3	3.3.3	4.0.3	4.1.4	4.2.4	4.3.4	5.0.4	5.1.4	5.2.6	5.3.5	6.0.5
3½	4.0.10	4.1.14	4.2.19	4.3.24	5.1.1	5.2.5	5.3.10	6.0.15	6.1.19	6.2.25	7.0.1
3¾	4.2.21	5.0.3	5.1.13	5.2.22	6.0.4	6.1.13	6.2.23	7.0.5	7.1.14	7.2.24	8.0.5
4	5.1.10	5.2.25	6.0.12	6.1.26	6.3.13	7.1.0	7.2.15	8.0.1	8.1.16	8.3.3	9.0.18

Formula for the Horse Power which Mild Steel Shafts of good quality will transmit at various speeds

For **HEAD SHAFTS** which are well supported:—

Multiply the cube of the diameter of the shaft by the revolutions per minute, and divide the product by the constant 100.

For **LINE SHAFTS**, well supported, from which power is being taken at frequent intervals along its length, such as obtains in Machine Shops, Engineering Works, Textile Factories, etc.:—

Multiply the cube of the diameter of the shaft by the revolution per minute and divide the product by the constant 66 2-3.

For **TRANSMISSION SHAFTS**, well supported in bearings, for transmitting power only and not subject to any transverse strain, also for short counter-shafts supported at short centres, and where the pull of belts, ropes, etc., come close to bearings:—

Multiply the cube of the diameter of the shaft by the revolutions per minute and divide the product by the constant 50.

Table of Diameters, Cubes of Diameters and Horse Powers at One Revolution per Minute.

Shaft Diameters	1⅛ in.	1⅜ in.	2 in.	2⅛ in.	2⅜ in.	2¾ in.	3 in.	3⅛ in.	4 in.	4⅛ in.	5 in.
Cubes of Diameters	3.375	5.36	8	11.39	15.62	20.79	27	42.87	64	91.12	125
Head Shafts—H.P. per rev... ..	.033	.053	.080	.113	.156	.207	.270	.428	.640	.911	1.250
Line Shafts—H.P. per rev.	.050	.083	.120	.170	.234	.311	.405	.643	.960	1.366	1.875
Transmission Shafts—H.P. per rev.	.067	.107	.160	.227	.312	.415	.540	.857	1.280	1.822	2.500

POWER TRANSMISSION—SHAFTING, ETC.

INFORMATION FOR "SETTING OUT."

The table as shown gives the safe limits at which bearings can be placed in ordinary machine shops. It must be understood, however, if conditions are not favourable, such as roof or foundation not being rigid, the bearings must be placed proportionately closer, if satisfactory results are to be obtained.

This page of information, in conjunction with the previous page giving horse-power various sizes of shaft transmit, will enable any prospective purchaser to accurately estimate the cost of any power transmission requirements.

LINE SHAFTING, CARRYING PULLEYS, ETC.

Approximate limit of distance apart of Centres of Bearings for Shafts which do not carry more than an average number of pulleys transmitting normal powers.

Diameter of Shaft in ins.	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	5½	6
Revs. per minute	Distance of Bearing Centres in Feet.											
100	9	9½	10	10½	11	11½	12	13	14	15	16	17
150	8¾	9¼	9¾	10¼	10¾	11¼	11¾	12¾	13¾	14½	15½	16¾
200	8½	9	9½	10	10½	11	11½	12¼	13¼	14	15	16¼
250	8¼	8¾	9¼	9¾	10	10½	11	11¾	12½	13¼	14¼	15¼
300	8	8½	8¾	9¼	9½	10	10½	11	11¾	12½	13¼	14¼
350	7¾	8	8½	8¾	9	9½	9¾	10¼	11	11½	12¼	13
400	7½	7¾	8	8¼	8½	8¾	9	9½	10	10½	11	11½

RULES FOR CALCULATING THE SPEED OF PULLEYS.

In calculating for Gears, multiply or divide by the number of teeth, as may be required. In calculating for Pulleys, multiply or divide by their diameter in inches.

The driving wheel is called the Driver, and the driven wheel the Driven.

Problem I.—The revolutions of Driver and Driven, and the diameter of Driven being given, required the diameter of Driver.

Rule.—Multiply the diameter of Driven by its number of revolutions, and divide by the number of revolutions of the Driver.

Problem II.—The diameter and revolutions of the Driver being given, required the diameter of the Driven to make a given number of revolutions in the same time.

Rule.—Multiply the diameter of the Driver by its number of revolutions, and divide the product by the required number of revolutions.

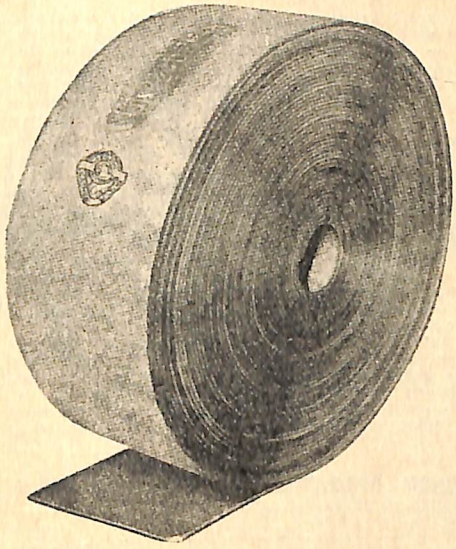
Problem III.—The diameter or number of teeth, and number of revolutions of the Driver, with the diameter or number of teeth of the Driven being given, required the revolutions of the Driven.

Rule.—Multiply the diameter or number of teeth of the Driver by its number of revolutions, and divide by the diameter or number of teeth of the Driven.

Problem IV.—The diameter of Driver and Driven, and the number of revolutions of Driven being given, required the number of revolutions of the Driver.

Rule.—Multiply the diameter of Driven by its number of revolutions, and divide by the diameter of the Driver.

BELTING



Our Australian Belting is sewn with independent stitches, which is the latest and best method of holding the plies together, the leather being first thoroughly cemented and then subjected to pressure under powerful presses and finally sewn with new improved wire sewing machines.

We are also in a position to supply endless belts, as illustrated below, at very short notice. The joints can be made of throng sewn copper wire or cemented as desired.

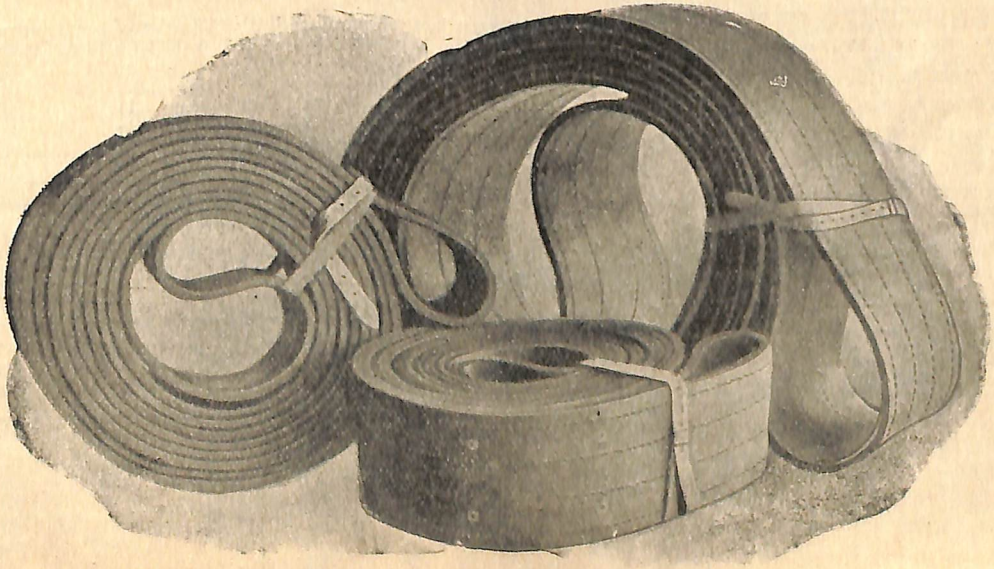
Or alternatively we will on demand lace cut lengths of belt with the clipper lacing, as shown on page ..., and to assemble all that remains to be done is to insert rawhide pin.

Owing to market fluctuations it is impossible to give definite prices on this line, but we will promptly quote discount off the list herewith on demand.

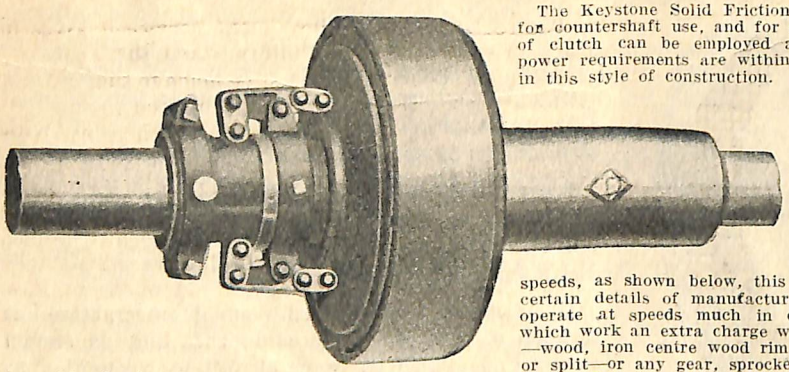
Australian Belting List Prices.

Size—Inch	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3½	4	4½	5	5½	6
Single Ply	8d.	9½d.	11½d.	1/2	1/5	1/7	1/10	2/2	2/5	2/9½	3/3	3/7½	4/1½	4/8	5/4
Double Ply	2/	2/4	2/8	3/	3/4	3/9	4/2	4/8	5/2	6/	7/	7/10	8/10	9/7	10/11
Three Ply	—	—	—	—	—	—	—	—	—	—	—	—	11/7	12/11	14/11

Subject to Discount.



KEYSTONE SOLID FRICTION CLUTCHES



The Keystone Solid Friction Clutch is particularly adapted for countershaft use, and for other places where a solid type of clutch can be employed advantageously, and where the power requirements are within the range of capacities offered in this style of construction. This clutch is a neat and self-contained device, embracing a system of multiple friction discs, which gives an extremely powerful clutch for its size. In the 4, 5 and 6 inch sizes, these friction surfaces are iron on iron; in all other sizes, the A-2 rings contain wooden friction blocks. While regularly made to operate at the maximum speeds, as shown below, this clutch, by special attention to certain details of manufacture, can be made to successfully operate at speeds much in excess of those mentioned, for which work an extra charge will apply. Any kind of a pulley—wood, iron centre wood rim, iron or steel, and either solid or split—or any gear, sprocket or sheave wheel, can be used upon this clutch. On account of the fact that these clutches, in Standard bores, are carried in stock by us, for immediate delivery, it is generally advisable, so far as possible, to use upon the clutch Keystone Wood or Steel Split Pulleys, both of which are likewise stock articles, and in that way the clutch and pulley complete can be secured at once, ready for service.

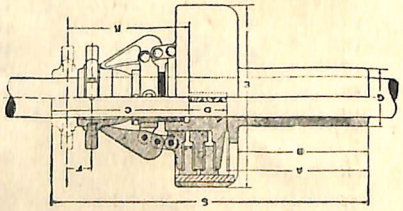
RATED CAPACITY OF DODGE SOLID FRICTION CLUTCHES WHEN OPERATING AT SPEEDS SHOWN

Size of Clutch.	Revolutions per Minute. 100 H.P.	150 H.P.	200 H.P.	250 H.P.	300 H.P.	350 H.P.	400 H.P.	450 H.P.	500 H.P.	Maximum Speed.
Inches.										
4	1¼	1⅞	2½	3⅛	3¾	4	4½	5	5½	600
5	2	3	4	5	5¾	6½	7	8	9	580
6	3	4	6	7	8½	9	10	11	12	560
7	4	6	8	10	11	12	13	15	16	540
9	6	9	12	15	17	19	20	22	23	500
10	10	15	20	25	28	31	36	39	40	480
14	30	45	60	75	85	95	102	—	—	400

The ratings above given are conservatively stated, but it must not be overlooked that they are based upon the carrying capacity of the Clutch when the load has been gotten up to speed. Frequently a much greater power is required to pick up a load from its condition of rest and get it up to speed than is required to keep it going. These clutches are stocked bored for shaft sizes as shown, viz.:—

	4	5	6	7	7 in. clutch
	1¼	1½	1½	1¾	2 in. shaft
Prices	£5/9/6	£6/4/-	£7/6/-	£8/0/6	£8/0/6
	9	10	12		14 in. clutch
	2	2¼	2½		3 in. shaft
Prices	£10/19/-	£13/10/-	£16/8/-		£23/14/-

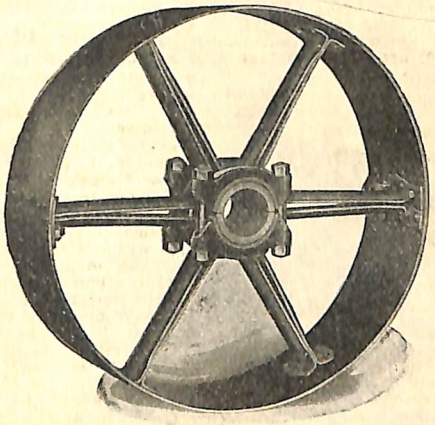
but some of the above sizes are capable of being bored out to suit a larger diameter shaft; for instance, a 6 inch clutch can be made to fit a 1⅞ inch shaft, but care must be taken that the clutch is not expected to transmit a higher horse power than that given in the table.



Size of Clutch.	Largest Shaft. Reg.	Stock Size.	A	B	C	D	E	F	K	S
		Sup. Ft.								
4	1¼	1¼	4½	4	4⅜	1⅛	5⅜	¾	4⅜	10⅜
5	1½	1½	5	4½	4⅞	1⅜	6½	⅞	4⅞	11½
6	1⅞	1⅞	6	5½	6⅜	1⅝	7 1/16	1¼	5⅞	14¼
7	2	1¾	7	6¼	6⅝	2⅛	8⅞	1¼	6⅜	16
8	2¼	2	8	7¼	7⅛	2¼	10½	1½	7	17¾
9	2½	2	10	9¼	7⅝	2⅜	11⅜	1½	7	20
10	3	2¼	11	10¼	7½	2⅛	12⅝	1	6⅞	21
12	3	2½	12	11	8½	2⅜	15¼	1¼	7⅞	23¼
14	3½	3	13	12	9	3	17⅝	1¼	8¼	25

PULLEYS.

KEYSTONE STEEL SPLIT PULLEYS



The real test of a pulley is the service it gives in use. **"Keystone" Steel Pulleys stand the Test.**

A perfect steel pulley must be made to successfully withstand the strains they are subjected to.

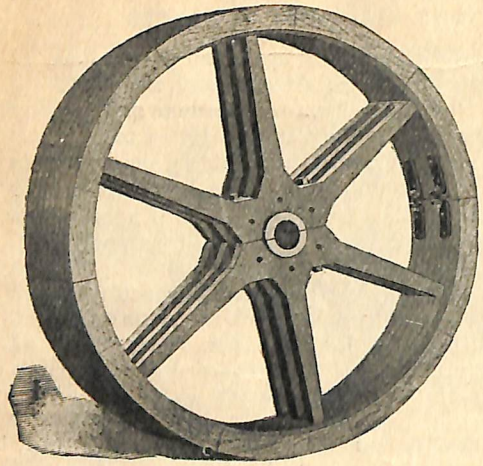
Structures of sheet metal held together by rivets and bolts do not contain the strength that make for safe positive driving power or durability of parts. These difficulties are overcome in **"Keystone" Steel Pulleys**, the pulley with the arm electrically welded to the rim. "Keystone" Steel Pulleys reach the apex of perfection in the manufacture of metal pulleys. Users will find they give perfect satisfaction as against the numerous breakdowns and imperfect driving common with some classes of wrought steel pulleys.

Every pulley is strong, safe, durable and fully guaranteed.

LIST PRICES.—Subject to Discount.

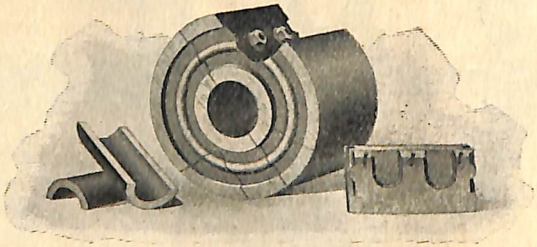
Dia. in Inches.	2 in.	3 in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.
3	19/–	20/–	21/–	—	—	—	—	—
4	20/–	21/–	22/–	23/–	—	—	—	—
5	21/–	22/–	23/–	24/–	—	—	—	—
6	26/–	28/–	29/–	31/–	34/–	—	—	—
7	27/–	28/–	30/–	33/–	35/–			—
8	28/–	29/–	31/–	34/–	36/–	41/–	47/–	—
9	29/–	30/–	33/–	35/–	37/–	42/–	48/–	—
10	30/–	31/–	34/–	36/–	39/–	44/–	49/–	54/–
11	31/–	33/–	35/–	38/–	40/–	45/–	50/–	53/–
12	33/–	35/–	39/–	40/–	44/–	48/–	54/–	64/–
13	34/–	36/–	40/–	43/–	47/–	54/–	60/–	70/–
14	—	38/–	43/–	47/–	51/–	59/–	67/–	75/–
15	—	39/–	46/–	48/–	55/–	64/–	73/–	82/–
16	—	41/–	48/–	51/–	57/–	69/–	79/–	88/–
17	—	44/–	50/–	54/–	61/–	73/–	84/–	94/–
18	—	46/–	53/–	58/–	64/–	77/–	89/–	100/–
19	—	48/–	56/–	63/–	69/–	84/–	94/–	108/–
20	—	50/–	62/–	68/–	75/–	89/–	100/–	119/–
21	—	52/–	67/–	74/–	80/–	94/–	108/–	130/–
22	—	54/–	71/–	79/–	86/–	100/–	118/–	140/–
24	—	62/–	74/–	83/–	91/–	110/–	131/–	159/–
26	—	—	80/–	—	100/–	120/–	142/–	178/–
28	—	—	90/–	—	107/–	129/–	151/–	191/–
30	—	—	100/–	—	117/–	144/–	166/–	206/–
32	—	—	110/–	—	129/–	161/–	188/–	224/–
34	—	—	120/–	—	144/–	181/–	213/–	250/–
36	—	—	132/–	—	162/–	200/–	239/–	281/–
38	—	—	—	—	181/–	220/–	259/–	310/–
40	—	—	—	—	200/–	237/–	281/–	335/–
42	—	—	—	—	219/–	269/–	313/–	363/–
44	—	—	—	—	244/–	297/–	344/–	394/–
46	—	—	—	—	275/–	325/–	375/–	419/–
48	—	—	—	—	306/–	350/–	406/–	450/–

PULLEYS



WOOD SPLIT PULLEYS

We carry at all times a very large range of wood pulleys, and always make special efforts in the prompt despatch of all orders for power transmission appliances.



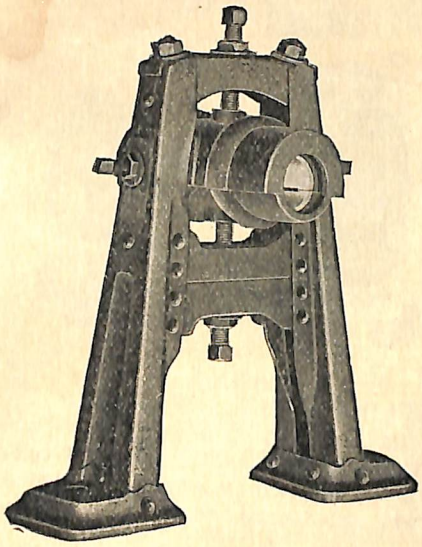
Pulleys up to 12in diam. are this style.

LIST PRICES (Subject to Discount)

Other Sizes on Application

	3	4	5	6	7	8	9	10	11	12	14
4	8/4	9/–	9/6	10/–	11/–	12/–	13/–	14/–	—	—	—
5	9/–	9/6	10/–	11/–	12/–	13/–	14/–	15/–	16/6	17/6	—
6	9/2	10/–	10/8	11/6	12/6	13/8	14/8	15/8	16/8	18/–	—
7	9/8	10/4	11/2	12/–	13/–	14/–	15/–	16/2	17/4	19/–	—
8	10/4	11/–	11/8	12/6	13/8	14/8	15/8	16/8	18/–	19/6	—
9	11/–	11/8	12/6	13/8	14/8	15/8	16/8	18/–	19/6	21/–	—
10	11/8	12/6	13/8	14/8	15/8	16/8	18/–	19/6	21/–	22/6	26/–
11	12/6	13/8	14/8	15/8	16/8	18/–	19/6	21/–	22/6	24/6	28/6
12	13/2	14/2	15/4	16/4	17/6	19/–	20/6	22/6	24/–	25/6	29/–
13	14/–	15/–	16/–	17/6	18/8	20/–	21/8	23/6	25/–	26/8	30/6
14	14/6	15/6	16/8	18/6	19/8	21/6	23/6	25/–	27/–	29/–	33/–
15	15/–	16/8	18/–	19/6	21/–	23/–	24/8	26/6	28/6	30/6	35/–
16	16/–	17/6	19/–	21/–	23/–	25/–	27/6	29/6	31/6	33/6	37/6
17	16/8	18/6	20/6	22/6	24/8	26/8	29/–	31/–	33/–	35/–	39/8
18	17/6	19/8	21/8	24/–	26/–	28/–	30/–	32/6	35/–	37/6	43/–
19	18/6	20/6	22/6	24/8	27/6	29/8	32/6	34/8	37/6	39/8	46/6
20	19/6	21/8	24/6	26/8	29/6	31/8	34/8	37/6	40/6	43/6	50/–
21	20/–	22/6	25/–	27/6	30/6	33/6	36/6	39/6	42/6	46/–	54/–
22	21/–	23/6	26/6	29/6	32/6	35/–	38/6	41/8	45/–	49/–	56/6
24	23/–	26/–	29/6	32/6	36/–	39/6	43/–	46/8	50/6	54/6	63/–
26	26/–	29/6	32/6	36/–	39/8	44/–	48/–	52/6	57/6	62/6	74/–
28	29/6	32/6	36/–	39/8	44/–	49/6	53/6	58/6	63/6	69/–	81/–
30	32/6	36/–	39/8	44/6	49/6	54/6	59/8	65/–	71/–	77/6	90/–
32	36/6	39/8	44/–	49/6	53/8	59/–	64/8	71/–	77/6	84/8	100/–
34	39/6	44/6	49/6	54/8	60/6	66/6	72/6	79/6	86/6	94/–	109/–
36	43/–	49/–	55/–	61/–	67/–	74/–	81/–	88/–	92/–	100/–	117/–
38	—	54/–	60/–	67/–	74/–	82/–	89/–	96/–	102/–	109/–	125/–
40	—	58/–	66/–	73/–	81/–	89/–	97/–	104/–	111/–	117/–	134/–
42	—	63/–	71/–	79/–	88/–	96/–	104/–	113/–	121/–	129/–	146/–
44	—	71/–	79/–	88/–	96/–	104/–	113/–	121/–	129/–	138/–	154/–
46	—	79/–	88/–	96/–	104/–	113/–	121/–	129/–	138/–	150/–	167/–
48	—	88/–	96/–	104/–	113/–	121/–	132/–	142/–	151/–	161/–	179/–

"LYTESRONG" PRESSED STEEL SHAFT HANGER



With either Roller or Ring Oiling Bearings.

Uniform and Simple Adjustment in Four Directions.

Equally applicable as Hangers or Floor Stands.

Scientifically constructed, folding the metal to give the greatest strength and rigidity.

One-half the weight of Cast Iron Hangers.

As illustrated hereunder, these Hangers can be supplied with "Roller Bearings" or "Ring Oiling Bearings," whichever preferred.

Roller Bearings are constructed of three integral parts—the Housing, the Rollers and Retainer, and the High Carbon Steel Sleeve.

The following speeds, recommended as maximum for all BOND ROLLER BEARINGS, allow for an ample factor of safety :

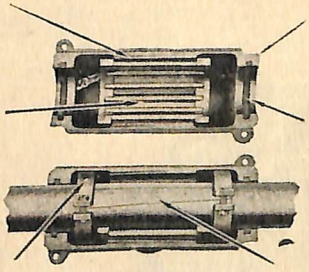
- 1 15/16 and smaller, maximum speed 600 r.p.m.
- 2 3/16 to 2 15/16, maximum speed 400 r.p.m.
- 3 3/16 to 3 15/16, maximum speed 300 r.p.m.
- 4 3/16 to 4 15/16, maximum speed 250 r.p.m.

In some instances an excess of 25 per cent. of these speeds is permissible, depending upon conditions.

High Carbon Steel Liner.
All sizes, 1 15/16 inches and up.

Case Hardened Rollers and Retainer.

Electrically Welded Steel Collars.
An integral part of the sleeve.



Split Housing.
Cannot be incorrectly coupled.

Felt Seal.
An absolute retainer for lubricant.

High Carbon Steel Split Sleeve.
A true running ground surface for the rollers.

PRICES: HANGER FRAMES ONLY.

No. 2 Pattern

8" drop	18/3
10" ,,	19/3
12" ,,	£1
14" ,,	£1/2/–
16" ,,	£1/4/3
18" ,,	£1/8/3
20" ,,	£1/11/3

No. 3 Pattern.

12" drop	£1/13/9
14" ,,	£1/16/6
16" ,,	£1/19/6
18" ,,	£2/2/3
24" ,,	£2/13/6

DROP OF HANGER.
Prices complete with Bearings.

Shaft Dia.		8	10	12	14	16	18	20
1¼"	Ring Oiling	£1/2/6	£1/3/6	£1/4/3	£1/6/3	£1/8/6	£1/12/6	£1/15/6
1½"	Roller Bearings ..	£2/14/9	£2/15/9	£2/16/6	£2/18/6	£3/0/9	£3/4/9	£3/7/9
1½"	Ring Oiling	£1/3/–	£1/4/–	£1/4/9	£1/6/9	£1/9/–	£1/13/–	£1/16/–
1½"	Roller Bearings ..	£3	£3/1/–	£3/1/9	£3/3/9	£3/6/–	£3/10/–	£3/13/–
2"	Ring Oiling	£1/6/6	£1/7/6	£1/8/3	£1/10/3	£1/12/6	£1/16/6	£1/19/6
2"	Roller Bearings ..	£3/15/6	£3/16/6	£3/17/3	£3/19/3	£4/1/6	£4/5/6	£4/8/6
2¼"	Ring Oiling	£1/7/3	£1/8/3	£1/9/–	£1/11/–	£1/13/3	£1/17/3	£2/0/3

No. 2 Pattern Frames with a capacity for { Ring Oiling Bearings for 1 3/16" to 2¼" shaft, Roller Bearings for 1 3/16" to 2" shaft.

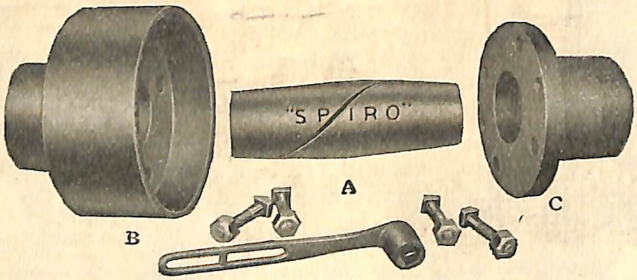
DROP OF HANGER.
Prices complete with Bearings.

Shaft Dia.		12	14	16	18	20	24
2¼"	Roller Bearings	£5/4/–	£5/6/9	£5/9/9	£5/12/6	£5/15/3	£6/3/9
2½"	Ring Oiling	£2/4/6	£2/7/3	£2/10/3	£2/13/–	£2/15/9	£3/4/3
2½"	Roller Bearings	£5/15/6	£5/18/3	£6/1/3	£6/4/–	£6/6/9	£6/15/3
3"	Ring Oiling	£2/9/3	£2/12/–	£2/15/–	£2/17/9	£3/0/6	£3/9/–
3"	Roller Bearings	£7/10/–	£7/13/9	£7/16/9	£7/19/6	£8/2/3	£8/10/9

No. 3 Pattern Frames with a capacity for { Ring Oiling Bearings for 2¼" to 3" shaft, Roller Bearings for 2¼" to 3" shaft.

In ordering, state whether Ring Oiling or Roller Bearing required.

POWER TRANSMISSION APPLIANCES

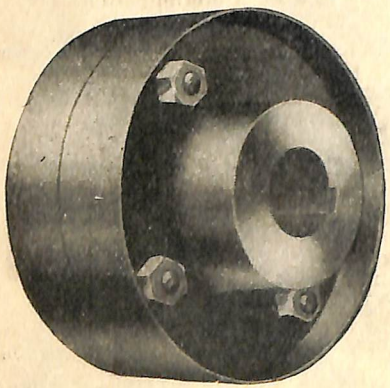


SAFETY COMPRESSION COUPLINGS

These Couplings are exceptionally strong and eliminate the necessity of keys. They are self-centring, and so ensure proper alignment of shaft. The power is transmitted by the internal sleeve and in these imported couplings there is perfect contact between the sleeve and shaft.

The bolts are protected by flanges, as shown.

Size	1¼	1½	1¾	2	2¼	2½	3
Price	25/	29/	29/	41/6	41/6	49/	73/6 each

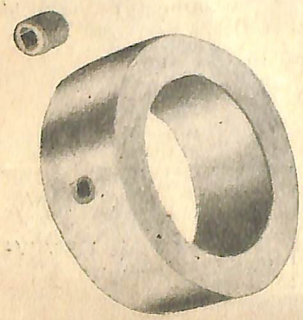


FLANGED PULLEY COUPLINGS

Turned, polished, and keywayed; bolt holes reamered and fitted with polished and turned bolts and nuts. Also recessed and projecting faces at the union of the two halves of the coupling, and bored true to Whitworth gauge.

Size	1¼	1½	1¾	2	2½	3	4
Price	22/6	32/6	36/	42/6	60/	75/	150/

Intermediate sizes at the price of the next larger size.



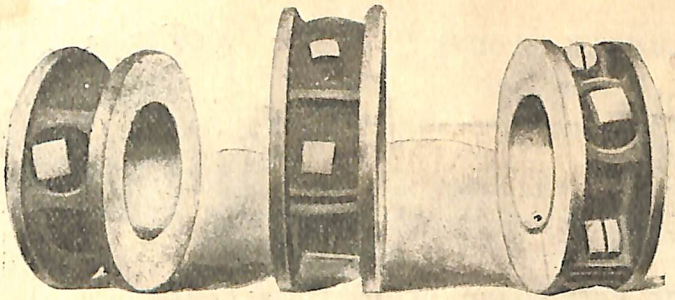
COLLARS

Collars, as illustrated, are fitted with sunken safety setscrews, cup pointed, and are turned and polished all over, and bored true to gauge.

Approximate Dimensions.

Bore	1 in.	1¼	1½	1¾	2	2¼	2½	2¾	3
Width	⅞	1	1 1/16	1⅛	1¼	1⅜	1⅜	1⅜	1½
Outer diam.	1½	1⅞	2¼	2⅝	3	3⅝	3⅝	3¾	4¼
Price	1/8	2/5	2/6	3/4	3/9	4/2	5/	5/5	5/10

SAFETY SET COLLARS



Collars are made solid and split for all sizes of shafting; are bored and machined on both faces, and fitted with hollow-pointed setscrews. All bolts and setscrews are protected by side flanges projecting beyond heads of nuts.

Solid. (In ordering, specify Solid.)				Split. (In ordering, specify Split.)			
Size.	Price.	Size.	Price.	Size.	Price.	Size.	Price.
1	1/5	2¾	3/9	1	2/-	2¾	6/8
1¼	1/8	3	4/2	1¼	2/8	3	7/4
1½	1/10	..	..	1½	3/4	..	..
1¾	2/3	3¼	4/7	1¾	4/-	3¼	8/-
2	2/6	3½	5/-	2	4/8	3½	8/8
2¼	3/1	..	..	2¼	5/4	..	..
2½	3/4	4	5/10	2½	6/-	4	11/4

PLUMMER BLOCKS

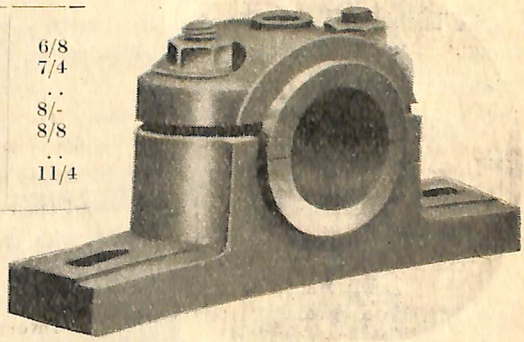
"LIGHT" SERIES

These Plummer Blocks are made from a specially well-designed pattern, bored, faced and fitted with top and bottom brasses equal to 1½ diameters.

When ordering specify Light.

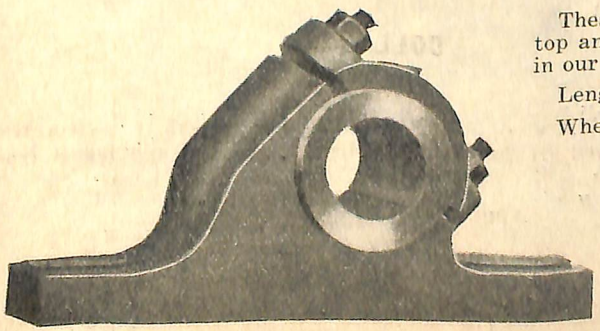
Diameter of Shaft.	Price.	Diameter of Shaft.	Price.
¾	3/6	2¼	14/-
⅞	4/-	2⅜	18/4
1	4/-	2½	18/4
1⅛	5/-	2¾	23/8
1¼	5/-	3	28/-
1⅜	6/-	3¼	35/-
1½	7/-	3½	42/-
1¾	8/6	..	..
2	10/6	4	59/6

Illustration of 2 in. Plummer Block.



ANGLE PLUMMER BLOCKS

"LIGHT" SERIES



These blocks are bored, faced, and fitted with top and bottom brasses of the same type as used in our light series Plummer Block.

Length of brasses equal to 1½ diameter.

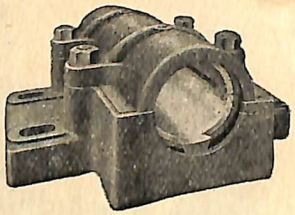
When ordering specify "Angle."

Diameter of Shaft.	Price.	Diameter of Shaft.	Price.
1	6/9	..	..
1¼	6/9	2¼	17/2
1½	8/6	2½	20/-
1¾	10/9	2¾	23/6
2	13/9	3	29/-

POWER TRANSMISSION APPLIANCES

RIGID RING OILING PLUMMER BLOCKS.

Babbitted Bearings, 3½ Diameters Long

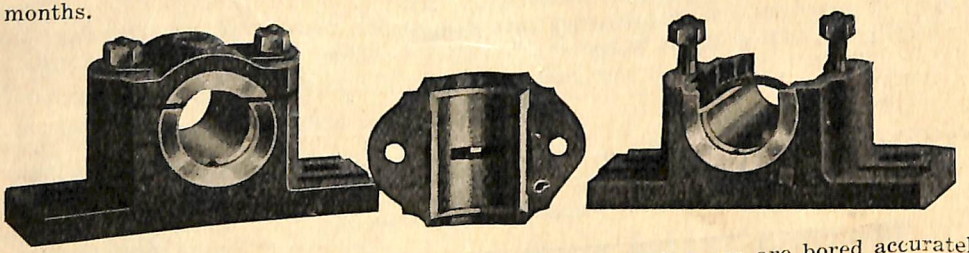


These bearings fulfil a demand for a cheap well-made article that will stand up to heavy duty.

Diam of shaft	1¼	1½	1¾	2	2¼	2½	3	3½
Price	7/9	9/	11/6	15/	17/6	19/	24/	40/

HEAVY RING TYPE SELF-OILING PLUMMER BLOCKS

A well-made and reliable Plummer Block which costs little more than the ordinary pattern plain 1½ in. diameter block. They have large oil reservoirs, and one filling of oil will last for many months.



The bearings are brass, and fitted with split steel rings; the brasses are bored accurately and faced. Length of bearing is 1½ diameters, plus ⅝ inch.

Diameter of shaft in inches	1¼	1½	1¾	2	2¼	2½	3	3¼	3½
Price	9/	12/	15/	19/	25/	33/	48/	58/	76/

BALL-BEARING PLUMMER BLOCKS

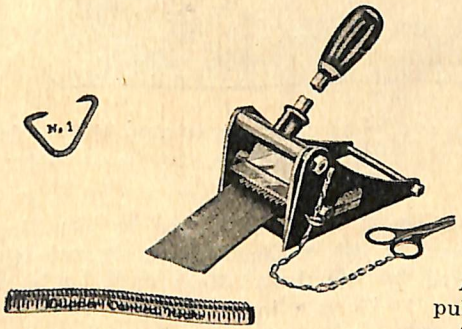
Fitted with S.K.F. Ball Bearings.

In view of the increasing demands for Ball Bearings, we now have a complete stock of these bearings, and can supply a first-class article at a reasonable price. The bearings have swivelling movement, and are self-aligning. They have a double row of ball bearings and are so arranged that the bulk of the load at any given moment is carried by two or more balls. They are well worth the extra cost, as the friction is reduced 75 per cent. to 90 per cent. by the use of these ball bearings, and the saving in power in one year amply covers the extra cost.

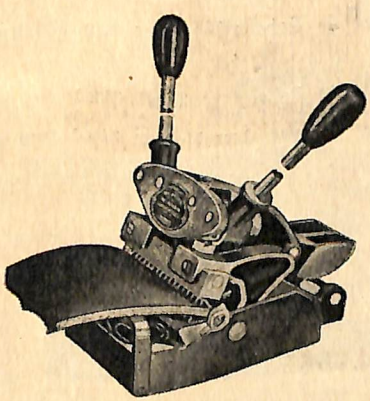
Diameter of shaft in inches	1¼	1½	1¾	2	2¼	2½	3
Price, light series	64/	69/6	75/6	86/	109/3	129/	160/

CLIPPER BELT LACING

Clipper Machines.



Junior No. 1.



Standard No. 3.

Baby No. 0.

The Clipper Joint.

A smooth, flexible, durable joint that will not tear or pull out. Easily and rapidly applied.

Suitable for every kind of belting—leather, rubber, canvas, fabric, etc.—not exceeding $\frac{3}{8}$-inch in thickness.

Clipper Machines.

Sold on 30 days' approval and perpetually guaranteed by the manufacturers so long as genuine Clipper Belt Hooks are exclusively used in them.

Junior No. 1.

For belts up to 2 inches in width. Especially adapted for use in textile establishments, watch and clock factories, garages, etc. Weighs 3 pounds.

Price, No. 1, ready for use, £3/10/- each.
Price, No. 1 Hooks, 6/9 per box.

Only No. 1 Clipper Belt Hooks can be used in Junior Clipper Belt Lacer No. 1.

Standard No. 3.

Particularly adapted for belts up to 6 inches wide. Will also lace wider belts satisfactorily. Can be carried to the belt—weighs only 24 pounds.

Price, No. 3, ready for use, £8 each, includes 1 box No. 4 hooks.
Price, No. 3, including one box, each, Nos. 3, 4 and 5 Carded Hooks, £8/18/ complete.

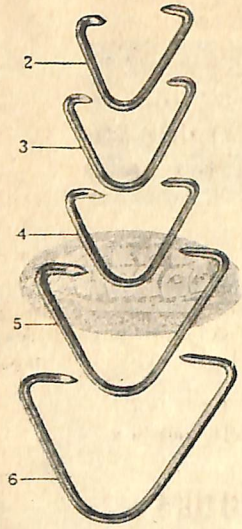
Baby No. 0.

For use in any ordinary vise. Laces belts up to 4 inches wide. Quickly proves its usefulness in tool rooms, garages, and small shops. Weighs 3 pounds.

Price, No. 0, ready for use, £2/5/- each.
Price, No. 0, including one box, either No. 3 or No. 4 Carded Hooks, £2/13/3, complete.

CLIPPER BELT LACING

Clipper Belt Hooks
Actual Size.



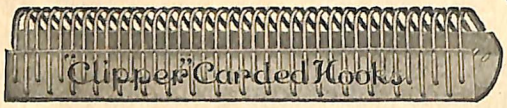
These sizes adapted for use in Standard No. 3 and Baby No. 0 Clipper Belt Lacers. No. 1 Hooks (for use only in Junior Clipper Belt Lacer, No. 1) not shown.

The secret of the success of Clipper Hooks lies in their design, and the manner in which one point is placed behind the other as shown above. While a powerful grip is thus secured, no belting fibers are cut or injured. The belt is not weakened at the joint.

"Clipper"
TRADE MARK

Cross Section of Embedded Hooks

Clipper Belt Hooks



Made from special steel wire tempered to combine great tensile strength with ability to withstand fatigue.

Carded on paper for convenience in handling. The cards can be cut, without waste, to suit the width required for any belt. Each card holds 37 hooks.

Packed in boxes containing 27 cards (one size) and 14 twisted rawhide pins—sufficient for lacing both ends of belt, total width 80 inches.

Selection of size is determined by the **thickness** of belt.

Price No. 2, for Thin Belts Over Small Sized Pulley, 6/6 per box.
Price No. 3, for Thin Belts Over Medium Sized Pulley, 8/3 per box.
Price No. 4, for Belts Not Over ¼ inch Thick, 8/3 per box.
Price No. 5, for Belts Not Over 5/16 inch Thick, 9/9 per box.
Price No. 6, for Belts Not Over ⅜ in. Thick, 11/6 per box

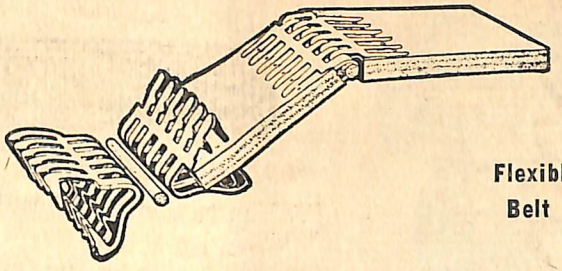
Clipper Connecting Pins

Twisted Rawhide pins are for general requirements. Fibro (waterproof) pins are for use wherever there is moisture.

Packed in standard bundles containing 24 pins, 12 inches long.

Size.	Diameter.	For	Price per Bundle Fibro	Rawhide.
No. 1, No. 2 and No. 3 Hooks			2/6	6/6
No. 13,	6/64 inch,	very thin belts		
No 12.	7/64 inch,	No. 4 Hooks	2/6	6/6
No. 11,	8/64 inch,	No. 5 Hooks	2/6	6/6
No. 10,	9/64 inch,	No. 5 Hooks	2/6	6/6
No. 9,	10/64 inch,	No. 6 Hooks	3/	7/6
No. 8,	11/64 inch,	No. 6 Hooks	3/6	8/
No. 7,	12/64 inch,	heavy belts	4/3	
No. 5,	14/64 inch,	heavy belts	5/6	
Assorted Sizes, Nos. 8-13			2/6	

ALLIGATOR BELT FASTENERS



Flexible Steel Belt Lacing

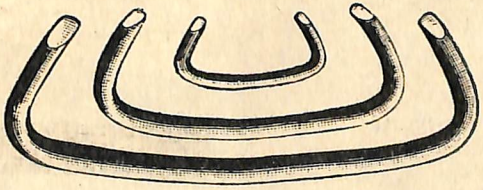
For Leather, Rubber, Balata, Cotton, Canvas, or "Roko" Patent Belting. A separate lacing, hinging on a rawhide or steel rocker pin.

Some Advantages.—Never lets go. Works flexibly over small pulleys; does not cut the threads in textile belts, and reduces the tendency to fray at the ends. Specially adapted for overhead drives. Works perfectly in contact with an idler. Quickly applied. Nothing needed but a hammer.

No.	25	35	45	65
Price	20/6	13/9	18/6	24/ per box

STEEL OVAL-POINTED BELT HOOKS

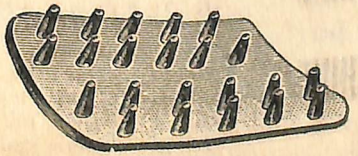
Made from steel wire of special temper, with smooth oval points, they supersede leather laces, and belts pierced with these fasteners can be taken up or tightened in one quarter of the time required for leather laces.



No.	5	6	7	8	9	10	11	12	
Length overall	2 1/16	1 7/8	1 9/16	1 3/8	1 1/8	7/8	13/16	3/4	
Price	64/-	54/-	40/-	31/-	27/-	23/4	20/-	19/-	per 1000

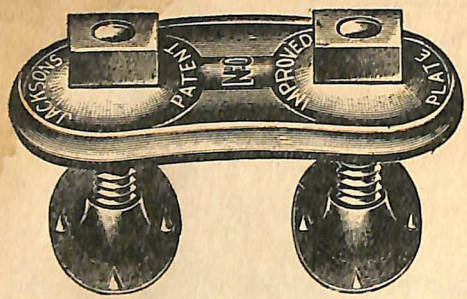
HARRIS BELT FASTENERS

This method of connecting leather belting is an improvement on lacing or sewing the joints. It is easily and quickly applied, and the joint is as strong as any other part of the belt.



For belts	1	1¼	1½	2	2½	3	
Price	2/	2/	2/3	3/	3/4	3/10	per gross

JACKSON'S NEW IMPROVED PATENT PLATE FASTENERS



WITH CONCAVE AND CONVEX WASHERS

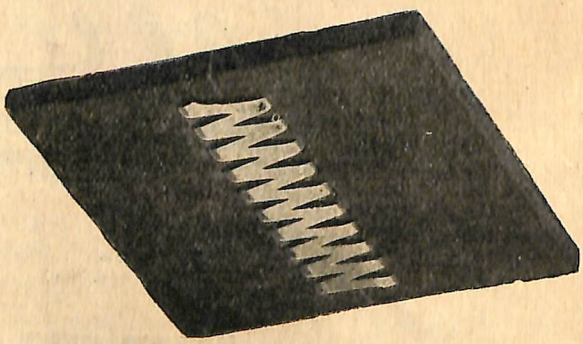
We beg to call the attention of the trade to an Important Patented Improvement in this, the well known Concave and Convex Plate Fastener.

As will be seen from the illustration herewith, the rim is now raised or turned over the edges, so as to give additional strength to the plate, thus obtaining a stronger fastener without adding to the weight.

PRICE LIST AND SIZE OF IMPROVED PLATE FASTENERS TO USE, WITH PLY AND WIDTH OF BELTS.

Size of Fastener to Use.	Belts Suitable for	Pulleys.	Speed.	Prices.
No. 0 ..	4-ply, to 5 in. wide	6 to 10 in. diam.	1,000 revolutions per min.	Screw diam. ¼ in., 4/6 per doz.
No. 1 (small)	4-ply, to 6 in. wide	6 to 12 ,,	900 ,, ,,	,, ,, ¼ in., 5/- per doz.
No. 1 (large)	4 and 6-ply, to 9 in. wide	10 to 16 in. ,,	800 ,, ,,	,, ,, 9/32 in., 6/3 per doz
No. 2 (small)	4 and 6-ply, to 12 in. wide	14 to 20 in. ,,	High Speed, Small Pulleys,	,, ,, 5/16 in., 6/9 per doz.
No. 2 (large)	4 and 6-ply, to 15 in. wide	16 to 30 in. ,,	Light Work require Small Plates.	,, ,, 11/32 in., 8/- per doz.
No. 3 ..	6 and 8-ply, to 24 in. wide	24 to 48 in. ,,	Lower Speed, Large Pulleys, Heavy Work require Large Plates.	,, ,, ⅜ in., 9/- per doz.
No. 4 ..	8 and 10-ply (8-ply, 16 in. and up)	30 to 72 in. ,,		,, ,, 13/32 in., 11/- per doz.

BRISTOL'S PATENT STEEL BELT LACES



The wedge-shaped points when driven through the belt force the fibres aside without cutting them, hence the ends of the belt are not weakened, as when holes are punched.

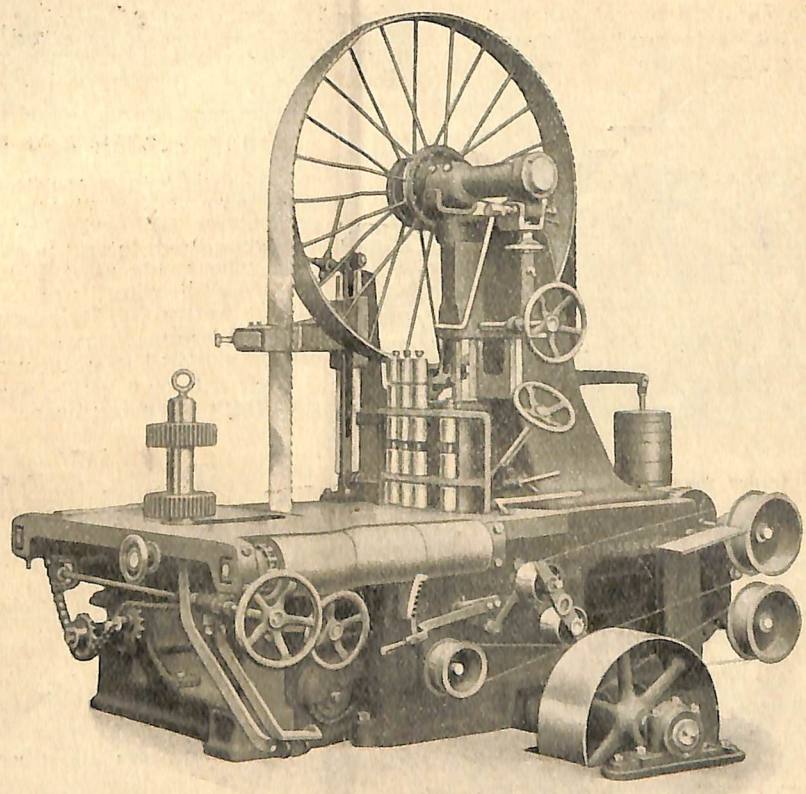
No. 1, for Single Leather Belts, 3/16 to ¼ inch thick, 4/ per box.
No. 2, for Extra Heavy and Wide Single Leather Belts, ¼ to 5/16 inch thick, 5/6 per box.
No. 3, for Double Leather Belts, from 5/16 to ⅜ inch thick, 7/ per box.
No. 4, for Heavy Double Leather Belts, from ⅜ to 7/16 inch thick, 9/6 per box.
No. 5, for Extra Heavy Double Leather Belts, from 7/16 to 9/16 inch thick, 12/ per box.
No. 11, for 3-ply Rubber or Cotton Belts, 3/16 to ¼ inch thick, 4/ per box.
No. 12, for 4-ply Rubber or Cotton Belts, ¼ to 5/16 inch thick, 5/6 per box.
No. 13, for 5-ply Rubber or Cotton Belts, 5/16 to ⅜ inch thick, 7/ per box.
No. 14, for 6-ply Rubber or Cotton Belts, ⅜ to 7/16 inch thick, 9/6 per box.
No. 15, for 7-ply Rubber or Cotton Belts, 7/16 to 9/16 inch thick, 12/ per box.

ROBINSON WOODWORKING MACHINERY

As Victorian Agents for the well-known firm of Thomas Robinson and Son Ltd., of Rochdale, England, we carry a large range of wood-working machines of all descriptions in stock for immediate delivery. All inquiries will be attended to in the most expeditious manner. We have on our staff a specialist, well acquainted with all types of wood-working machinery, who is at the service of our customers for installation and advice.

We illustrate herewith a few representative lines of "Robinson" Wood-working Machines.

BAND RESAWS.—Type MF



This Machine incorporates the following valuable features:—

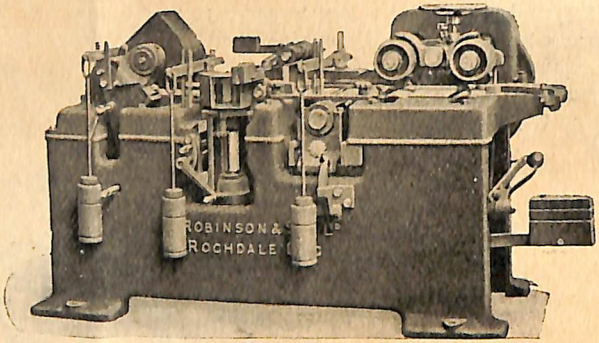
1. Combined horizontal and vertical roller feed—a very powerful and effective combination.
2. Patent method of driving and supporting the vertical feed roller, which is easily removable for cutting wide flitches.
3. Patent quick adjusting roller fence, with index plate.
4. Patent variable feed speed gear.

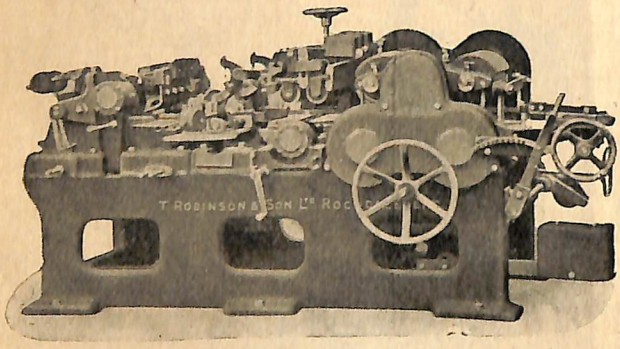
ROBINSON WOODWORKING MACHINERY

These illustrations only cover a few of our stock machines, which include, in addition to those shown, Chain Morticers, Band Saws, Tenoning Machines, Three Drum Sand Papering Machines, etc.

"RD" PLANER AND MOULDER

This machine is of the semi-outside type, and the access to the feed rolls allows of easy substitution of bevel rolls. The machine is capable of working any kind of straight mouldings, from the smallest up to 7 in. x 3 in. It will also **plane** and **match** or **tongue** and **groove** operating on all four sides at once.





Above Illustration shows Four Heads

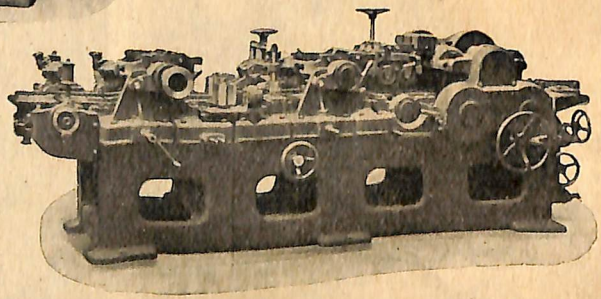
And either with square heads or circular heads for thin H.S. cutters, and complete with jointing devices.

"NL" PLANER AND MOULDER

This design of machine is one of the most popular Robinson machines for the progressive mill or timber yard. Being a most up-to-date design at a reasonable price, the heads all run in double row heavy ball bearings, and are very accessible. Write for full specification.

As illustrated, these "NL" machines can be supplied in a variety of styles.

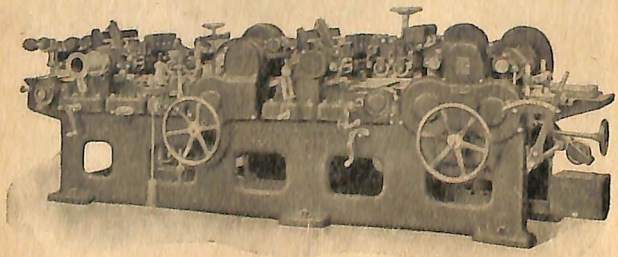
With 4, 5, or 6 heads, with or without profiling or beading head.



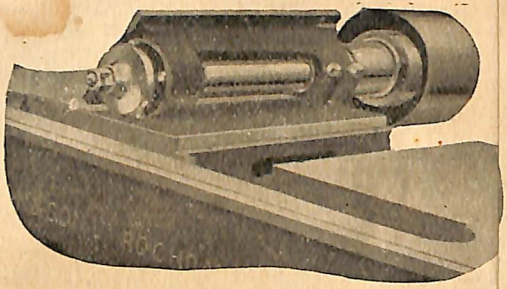
Above Illustration shows Six Heads

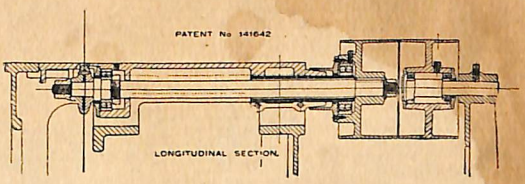
SIX-ROLLER HIGH SPEED PLANER AND MATCHER—TYPE QX

These machines are made with heavy double row ball bearings, a simple and effective pressure system, and great accessibility to the cutters.



Made in four sizes, with four, five or six cutter heads. Various forms of cutter heads can be used on the second top and bottom spindles. Circular cutter blocks and jointing devices can be fitted to all heads. Automatic feeding-in table can be supplied for feeding up to 300 ft. per minute. Write for full particulars.



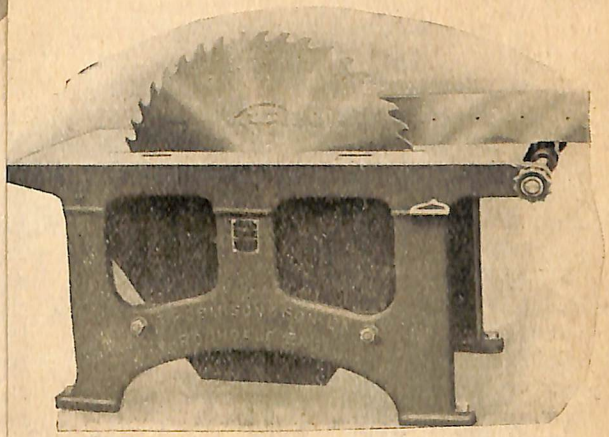


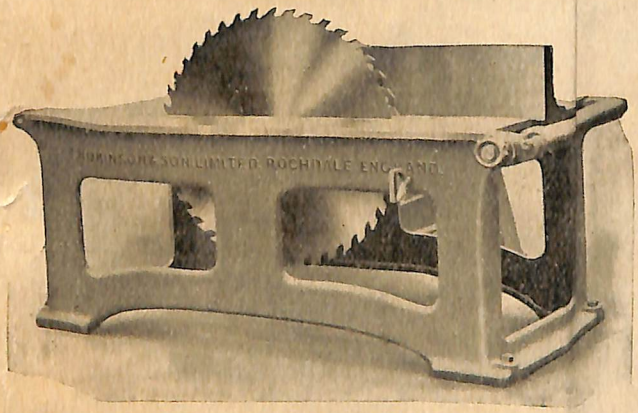
Sectional View.

PLAIN SAW BENCH—.TYPE R.G.

These benches have ball-bearing mountings to the spindle, but of a more simple type than illustrated above, and are the cheapest type of "Robinson" plain saw bench.

Bench, 5 ft. x 2 ft. 6 in., saw 42 in.
Bench, 4 ft. x 2 ft. 3 in., saw 36 in.

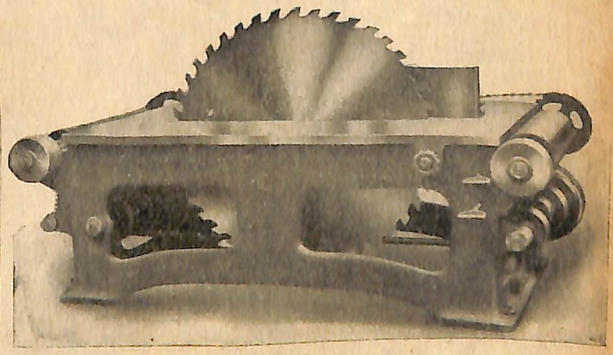




PLAIN BENCH—TYPE Q

This type bench is probably the highest grade plain bench built, and is built with ball bearings to the spindle, on the system shown above.

Bench, 6 ft. x 3 ft., saw 48 in.
Bench, 5 ft. 6 in. x 2 ft. 9 in., saw 42 in.
Bench 5 ft. x 2 ft. 6 in., saw 36 in.
Bench 4 ft. x 2 ft. 3 in., saw 30 in.



CONTINUOUS ROLLER FEED BENCH—TYPE M5

These saw benches are one of Robinson's best known manufactures, and are provided with the type of bearing shown above.

Bench 6 ft. x 3 ft. 9 in., saw 48 in.
Bench 5 ft. x 3 ft. 9 in., saw 42 in.

INDEX TO CATALOGUE

Wholly set up and Printed in Australia by Wilke and Co. Pty. Ltd., 241-245 William street, Melbourne.